



AGENDA

Planning and Zoning Commission

Wednesday, December 18, 2024

6:00 pm Regular Meeting

Sunnyvale Town Hall

Council Chambers

127 N Collins Rd.

Sunnyvale, TX 75182

A. Call Meeting to Order

B. Public Comment

The Planning and Zoning Commission invites citizens to address the Planning and Zoning Commission on any matter, except items on the agenda and public hearings that are included on the agenda. Comments related to items on the agenda and public hearings will be heard when the specific item/hearing starts. Citizen comments are limited to three (3) minutes, unless otherwise required by law. To address the Commission, please fill out a Public Comment Card and submit it to a staff member prior to the Public Comment section on the agenda. The Planning and Zoning Commission is not permitted to take any action or discuss any item not listed on the agenda. The Commission may choose to place the item on a future agenda.

C. Consent Agenda Items

1. Consider and act upon November 20, 2024, Planning and Zoning Commission meeting minutes
[November 20, 2024 Meeting Minutes](#)

D. Public Hearing Items

1. Hold a public hearing, discuss, and consider making a recommendation to Town Council regarding an amendment to the Unified Development Ordinance (UDO), including but not limited to amending **Section 3.06.03 – Tree Protection Standards . Case 1829-Z UDO Amendment – Tree Protection Standards.**

[Staff Report](#)

[UDO Excerpt - Section 3.06.03 Tree Protection Standards](#)

[DRAFT Tree Protection Standards](#)

[DRAFT Tree Protection Standards - with annotations](#)

E. Adjourn

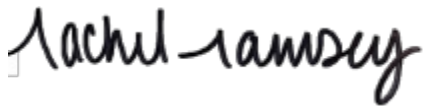
NOTE: The Planning and Zoning Commission reserves the right to meet in Executive Session closed to the public at any time in the course of this meeting to discuss matters

listed on the agenda, as authorized by the Texas Open Meetings Act, Texas Government Code, Chapter 551, including §551.071 (private consultation with the attorney for the Town). Any decision held on such matters will be taken or conducted in Open Session following the conclusion of the Executive Session.

The Town of Sunnyvale is committed to compliance with the Americans with Disabilities Act (ADA). Reasonable accommodations and equal access to communications will be provided to those who provide notice to the Town Secretary at 972-226-7177 at least 48 hours prior to the meeting.

Notice is hereby given that the Sunnyvale Planning and Zoning Commission will conduct its Regular Meeting on Wednesday, November 20, 2024 at the Sunnyvale Town Hall. The public is encouraged to attend the meeting. Email comments may also be submitted to surupa.sen@townofsunnyvale.org by 3 p.m. the day of the meeting. The link to the live stream of the meeting will be posted on Sunnyvale's Facebook page Town of Sunnyvale – Government.

I hereby certify that the foregoing notice was posted at Town Hall, 127 N. Collins Rd., Sunnyvale, Texas and remained so posted continuously for at least 72 hours preceding the scheduled time of said meeting:



Rachel Ramsey, Director of Administration/Town Secretary

Date Posted: December 13, 2024

Time Posted: 2:00 p.m.

Date Removed from Bulletin Board: _____

Removed By: _____

Notice of Possible Quorum of Town Council

A quorum of the Town Council may be in attendance. This is not a regularly scheduled meeting of the Town Council. As a governmental body, the Town Council will not deliberate nor take any formal action on any items discussed.



MINUTES

Planning and Zoning Commission

Wednesday, November 20,
2024 6:00 pm Regular Meeting

Sunnyvale Town Hall
Council Chambers
127 N Collins Rd.
Sunnyvale, TX 75182

A. Call Meeting to Order

Chairman Ted Mays called the meeting to order at 6:00 p.m. with the following Members and Staff present: Chairman Ted Mays, Member Carly Hagen, Member Lisa Burton, Member Jerry Johnson, Member Kevin Points, Alternate Member Andrea Varnai, Alternate Member Joshua Parisi, Director of Planning and Development Surupa Sen, Assistant Town Manager Mark Rauscher, Town Engineer Matt Holzapfel, and Senior Permit Technician Melinda Diaz.

Member Bronson Blackson, and Member Troy Childers were absent.

B. Public Comment

Chairman Mays opened the floor to public comments.

With no one coming forward, he closed the floor to public comments.

C. Consent Agenda Items

1. Consider and act upon October 23, 2024, Planning and Zoning Commission meeting minutes.
2. Consider approving a replat of Lot 4R, Block A, Sunnyvale Center, consisting of 10.23-acres tract of land, being a replat of lots 3, 4, and 8, Block A, Sunnyvale Center, and a 1.12-acre Tract of land, out of L J Ridlin Survey, Abstract 1253, Page 495, within Industrial (I) zoning district, located at 458 Clay Road. **Case 1825-PLT/Sunnyvale Center Replat.**
3. Consider approval of a preliminary plat for Lot 1, Block A, Saiger Farms Addition, consisting of 16.39-acres tract of land, within Single Family 1 (SF-1) residential zoning district, located at the 367, 371 Town East Boulevard. **Case 1826-PLT/Saiger Farms Addition Preliminary Plat.**

4.

Consider approving a final plat for Lots 1R, 2, 3 Block A, Daniel Steel Addition, consisting of 56.23-acres tract of land, within General Business (GB) zoning district, located at 4640 N Belt Line Road. **Case 1828-PLT/Daniel Steel Addition.**

Member Lisa Burton made a motion to approve as presented, Member Kevin Points seconded the motion.

Ayes: Vice Chair Carly Hagen, Chair Ted Mays, Member Jerry Johnson, Member Lisa Burton, and Member Kevin Points

Absent: Member Bronson Blackson, and Member Troy Childers

Motion Passed Unanimously 5- 0 on a recorded vote

D. Discussion and Action Items

1. Introduction to Roadway Impact Fees and the Role of the Capital Improvement Advisory Committee (CIAC)

Assistant Town Manager Mark Rauscher presented the item and was available to answer questions.

E. Adjourn

Vice Chair Carly Hagen made a motion to adjourn the meeting at 6:44 p.m., Member Kevin Points seconded the motion.

Ayes: Vice Chair Carly Hagen, Chair Ted Mays, Member Jerry Johnson, Member Lisa Burton, and Member Kevin Points

Absent: Member Bronson Blackson, and Member Troy Childers

Motion Passed Unanimously 5- 0 on a recorded vote

The undersigned presiding officer certifies that this is a true and correct record of the proceedings.

Attest:

Ted Mays, Chairman

Rachel Ramsey, Town Secretary

Planning and Zoning Commission
AGENDA ITEM REPORT
D.1



To: Planning and Zoning Commission

Subject: Hold a public hearing, discuss, and consider making a recommendation to Town Council regarding an amendment to the Unified Development Ordinance (UDO), including but not limited to amending **Section 3.06.03 – Tree Protection Standards. Case 1829-Z UDO Amendment – Tree Protection Standards.**

Meeting: Planning and Zoning Commission - December 18, 2024

Department: Development Services

Staff Contact: Surupa Sen

SUGGESTED ACTION:

Staff recommends approval of the proposed UDO amendment.

BACKGROUND INFORMATION:

This is a town-initiated Unified Development Ordinance (UDO) amendment as it relates to tree protection standards for all properties. UDO Tree Protection requirements are aimed at preserving and protecting natural, mature tree canopies within the city. Overall philosophy and approach in detailing the tree protection and mitigation standards are to preserve trees as an important resource that enhances the quality of life and to preserve environmentally sensitive areas, such as natural areas, floodplains, and open spaces.

The UDO exempts any “property being actively used for agricultural purposes” from compliance with the tree protection requirements. Additionally, Cedar trees (less than 11 caliper inches) and certain other trees, such as, mesquite, hackberry, honey locust, cottonwood, that are commonly referred to as “trash trees” are exempt.

There are no monetary penalties for removing protected trees without first obtaining a tree removal permit. These listed issues and lack of organizational clarity of the ordinance, makes enforcement and effective implementation of tree protection standards difficult. As a result, staff has initiated a thorough review of the ordinance and comparison with other municipalities

tree protection regulations as well.

PUBLIC NOTICE:

Texas State Legislature S.B. 929, passed into law last year, requires municipalities to mail out individual notices to property owners within affected zoning districts, if any zoning ordinance text amendment is proposed by the municipality. The Town is proposing amendments to the UDO-Tree Protection Standards to better enforce the regulations and improve quality and retention of the town's existing and future tree canopy.

As a result, 3,110 letters of notification were mailed to all the property owners within the Town on December 6, 2024. As of writing of this report, the town has not received any written response regarding the UDO Text Amendment request.

ATTACHMENTS:

[Staff Report](#)

[UDO Excerpt - Section 3.06.03 Tree Protection Standards](#)

[DRAFT Tree Protection Standards](#)

[DRAFT Tree Protection Standards - with annotations](#)

Planning & Zoning Commission
STAFF REPORT



To: Planning & Zoning Commission

Subject: Hold a public hearing, discuss, and consider making a recommendation to Town Council regarding an amendment to the Unified Development Ordinance (UDO), including but not limited to amending **Section 3.06.03 – Tree Protection Standards. Case 1829-Z UDO Amendment – Tree Protection Standards.**

Meeting: Planning & Zoning Commission – December 18, 2024

Department: Development Services

Staff Contact: Surupa Sen, AICP, Director of Planning & Development

BACKGROUND INFORMATION:

This is a town-initiated Unified Development Ordinance (UDO) amendment as it relates to tree protection standards for all properties. UDO Tree Protection requirements are aimed at preserving and protecting natural, mature tree canopies within the city. Overall philosophy and approach in detailing the tree protection and mitigation standards are to preserve trees as an important resource that enhances the quality of life and to preserve environmentally sensitive areas, such as natural areas, floodplains, and open spaces.

The current UDO tree protection requirements apply to all new subdivisions during preliminary and or final plat approval process, all nonresidential parcels at the time of site plan or development plan approval process, and during any land disturbing and development activities.

However, the UDO exempts any “property being actively used for agricultural purposes” from compliance with the tree protection requirements. Additionally, Cedar trees (less than 11 caliper inches) and certain other trees, such as, mesquite, hackberry, honey locust, cottonwood, that are commonly referred to as “trash trees” are exempt.

A tree removal permit is required before any tree is removed from any property. Mitigation in the form of replacing equivalent caliper inch trees on site or paying a fee in the tree forestation fund (when replacing all trees on site is not possible) are required as part of the tree removal permit approval. Irrespective of this mitigation requirement, due to the

current exemption provision in the UDO, no tree removal permit or mitigation are required if trees are removed from agricultural property or if any exempt trees are removed from any property.

There are no monetary penalties for removing protected trees without first obtaining a tree removal permit. These listed issues and lack of organizational clarity of the ordinance, makes enforcement and effective implementation of tree protection standards difficult. As a result, staff has initiated a thorough review of the ordinance and comparison with other municipalities tree protection regulations as well.

In the proposed draft ordinance, the overall organization and content have been laid out in such a manner that allows the reader easy access to find and follow specific sections of the code and relevant regulations. Following table shows the comparative reorganization for the existing and the proposed UDO section 3.06.03.

Current UDO Section 3.06.03	Proposed UDO Section 3.06.03
A. Purpose & Intent	A.Purpose & Intent
B. General Standards	B.Applicability
C. Exemptions	C.Tree Protection Plan Process
D. Tree Protection Requirements	D.Types of Tree Plans
	E.Exemptions
	F.Prohibited Activities
	G.Tree Replacement Requirements
	H.Tree Reforestation Fund
	I.Tree Maintenance and Enforcement
	List of Exhibits
	Exhibit A - Invasive And Noxious Trees And Plant List
	Exhibit B – Required Tree and Plant List

Agricultural Property Exemption

One of key challenges with the current tree protection standards was that agricultural property were exempt and clear cutting of agricultural property without a tree removal permit was allowed. The proposed ordinance requires submission of a tree canopy survey before tree removal is allowed on agricultural property. Furthermore, within 60 months or 5-years of tree removal permit approval for the agricultural use property, if the owner applies for any site plan, plat or development plan, the proposed ordinance allows staff to require mitigation of removed trees as accounted for on the tree removal permit. This will reduce clear cutting of agricultural properties without mitigation for future development.

Applicability

The applicability section of the ordinance have been elaborated and extended based on the stage and type of development. This allows staff to better enforce and require the tree preservation and mitigation plan, irrespective of the life cycle of a development. The table

below shows applicability of the proposed tree protection ordinance, and the type of plan required as part of each planning process.

Table 20: Tree Removal Permit Applications	
Type of Development Application	Type of Plans Required
New Development	
Zoning Change Application (with a Concept Plan)	Tree Canopy Delineation <u>and</u> Tree Protection Plan
Site Plan Application	Tree Survey and Tree Protection Plan
All plat applications (Preliminary Plat, Final Plat, Replat)	Tree Survey and Tree Protection Plan
Building Permit	Approved Tree Survey* and Tree Protection Plan During Construction
Existing Development	
Building addition: Less than 50%	Tree Survey and Tree Protection Plan for the expansion area only
Building addition: 50% or higher	Tree Survey and Tree Protection Plan for the entire site
Removal of any protected tree or Land disturbance	Tree Removal Permit (with a Tree Survey or Tree Canopy Delineation)
*Not applicable if approved Tree Removal Permit has been received during site plan or plat approval process.	

Penalty for Tree Removal without Permit

Proposed amending ordinance will introduce a penalty of \$250.00 per caliper inches for trees removed without permit. Where applicants request mitigation via paying to the tree reforestation fund, an increased fee of \$200.00 per caliper inch of tree removed will apply.

Exempt Trees List Removed

As discussed earlier, the current UDO Tree Protection Standards list certain “trash trees” and Cedar trees less than 11” as exempt from mitigation. The proposed amendment will remove this exemption. Any tree larger than 3 caliper inch will be considered protected, unless they are listed in the newly added, Exhibit A: Invasive and Noxious Trees and Plant list. Required tree and plant list has been expanded upon and will be made part of the amending ordinance as well

The proposed draft ordinance was discussed with Town Council at a prior work session meeting. After Commission consideration, the draft ordinance will be acted upon by Town Council in January 2025.



3.06.03. Tree Protection Standards

A. Purpose and Intent

To promote and protect the public health, safety, and general welfare of the community by providing for the regulation of planting, maintenance, and removal of trees located along rights-of-ways; within parks, open spaces, and floodplain areas; within public areas owned and controlled by the [Town](#); and on private property. This Section is specifically intended to:

1. To promote tree and tree canopy preservation through site design standards and by controlling indiscriminate removal of trees,
2. To contribute to the long-term viability of existing trees through their protection during land disturbing and land development activities; while balancing the rights of property owners with the overall interests of the community,
3. To preserve trees as an important resource that enhances the quality of life and the general welfare of the Town; by promoting its unique character as well as the physical, historical, and aesthetic environment,
4. To provide health benefits as they relate to the cleansing and cooling of air, thus contributing to the physical and mental wellness of the community,
5. To promote environmental elements that increase property values, reduce energy costs, reduce the amount of pollutants entering streams, and provide elements that are crucial to establishment of a healthy local ecosystem,
6. To promote and protect the health, safety, and general welfare of the public by creating an environment that is aesthetically pleasing and promotes economic development through an enhanced quality of life,
7. To encourage the preservation of environmentally sensitive areas, such as natural areas, floodplains, and open spaces that protect and enhance the water quality, ecosystem, and aesthetic environment, and
8. To recognize the economic value added to properties with trees and tree canopy coverage are maintained and supplemented by new trees.

B. General Standards

1. The requirements of this Section shall apply to real property within the corporate limits of the Town as follows:
 - a. All new subdivisions of land at the time of Preliminary and/or Final Plat approval;
 - b. All nonresidential parcels of land at the time of Site Plan or Development Plan Approval;
 - c. All replatting of undeveloped land; or
 - d. All land disturbing and development activities.
2. Prior to issuance of a [Certificate of Occupancy](#), the developer or builder of a residential lot shall plant a sufficient number of trees on the lot to assure that the following numbers of trees exist on the site:



Table 10: Minimum Number of Trees	
Lot Size	Number of Trees
1 acre or larger	3
Less than 1 acre	2

C. Exemptions

1. The requirements specified in this Section shall not be required in the following circumstances:
 - a. **Agricultural.** Property being actively used for agricultural purposes shall be exempt from the requirements specified herein.
 - b. **Damaged/Diseased Trees.** The tree is dead, diseased, damaged beyond the point of recovery, or in danger of falling down as determined by a certified arborist.
 - c. **Homeowners.** An owner-occupied residence located in a residentially zoned district on five (5) acres or less is exempt from the tree protection and replacement requirements of this ordinance.
 - d. **Public Safety.** The tree creates unsafe vision clearance, conflicts with other ordinances and regulations, or the tree is determined to be in a hazardous or dangerous condition; resulting in a danger to public health, safety or welfare.
 - e. **Utility Service Interruption.** The tree has disrupted a public utility service due to tornado, flood, or other natural act. Removal shall be limited to the part of the tree which is found necessary to re-establish and maintain the utility service.
 - f. **Utility Companies, Utility Service, and Distribution/Transmission Lines.** Utility companies shall not be subject to the tree protection or replacement requirements in this ordinance when establishing distribution and transmission lines. When establishing new utility service, services should be routed between the service pole or transmission and distribution lines and the building being served in a manner that does not require the removal of protected trees. All rights of ways, easements or similar types of public property maintained by utility companies shall not be subject to the tree protection or replacement requirements.
 - g. **Street Dedications.** Newly dedicated right-of-way (ROW), as defined by this Ordinance, necessary for the orderly and efficient development of property.
 - h. **Licensed Plant or Tree Nursery.** The tree is located on the property of a licensed plant or tree nursery, in which trees planted and growing on the premises are for the sale or intended sale to the general public in the ordinary course of business.
 - i. **Particular Tree Species.** The following species of trees are exempt from tree protection or replacement plan requirements:
 - i. Bois D’Arc
 - ii. Cottonwood
 - iii. Hackberry
 - iv. Honey Locust
 - v. Mesquite
 - vi. Mimosa



vii. Cedars that are less than 11 inches DBH

D. Tree Protection Requirements

1. No person engaged in new development shall cut down, destroy, move, remove, or effectively destroy through damaging (physically, chemically, or biologically), any protected tree located on private or public property, including without limitation public [Right-of-Way](#), easements, and franchise and utility easements, nor shall any land be disturbed, graded or otherwise developed within the Town without first having obtained approval of a tree protection plan, except as otherwise provided in this Section.
2. Clear-cutting of land is prohibited.
3. Tree Topping is prohibited.
4. Any trees protected on a site meeting the minimum specifications of this Section may be credited toward meeting the tree requirements in [Table 18](#) according to the following [Table 19](#):

Table 11: Tree Credit	
Circumference of Existing Tree	Credit Against Tree Requirement
6" to 8"	1.0 tree
9" to 30"	1.5 trees
31" to 46"	2.0 trees
47" or more	3.0 trees

5. A tree shall be considered protected if a minimum of 75 percent of the critical root zone is maintained at undisturbed natural grade and no more than 25 percent of the canopy is removed due to building encroachment.
6. Credit is granted for a protected tree or canopy area being saved only when it is clearly demonstrated by the [Applicant](#) that an improvement associated with the development has been designed to preserve a protected tree or canopy area.
7. For every protected tree or canopy area saved, the developer shall receive a one (1) inch caliper credit per one (1) inch DBH or one (1) square foot per one (1) square foot of tree canopy credit towards tree replacement.
8. The following procedures and standards apply to all new development.
 - a. An application for a development plan, site plan or subdivision plat must be accompanied by a Tree Survey or Tree Canopy Delineation (in lieu of a Tree Survey) and a Tree Protection Plan.
 - b. If a landscape plan is required the Tree Survey or Tree Canopy Delineation (in lieu of a Tree Survey) and Tree Protection Plan shall be submitted with the landscape plan. The Tree Survey or Tree Canopy Delineation (in lieu of a Tree Survey) and Tree Protection Plan must include the following information:
 - i. The graphic exhibits for a tree removal application in Subsection [3.06.03. D.14.b](#) hereof.



- ii. A graphic legend to be used throughout the plans for the purposes of showing the following: trees to be flagged, protective fencing, trees requiring bark protection, boring, and areas of cut and fill impacting protected trees.
 - iii. Graphic tree exhibit showing the tree being removed and being protected, and the features of those trees, including the critical root zone, trunk, canopy, drip line and caliper.
 - iv. Graphic exhibits showing methods of protection to include snow fences, boarded skirts, etc.
 - v. Graphic exhibits showing construction methods to include grade changes, boring, trenching, etc.
- 9. Tree Protection Plan
 - a. The tree protection plan must be approved by the [Director of Development Services](#) if the [Applicant](#) demonstrates that all protected trees to be removed are necessary for efficient and orderly development of the property and that adequate provision is made for replacement of removed trees pursuant to this Section.
- 10. Tree Canopy Delineation Method
 - a. Aerial photography may be used for properties that contain a wooded area(s), in lieu of a Tree Survey.
 - b. Authorization for submittal of an aerial photograph accompanied by a transparent plan of the development at the same scale as the photograph showing all non-disturbance areas, proposed exemption areas, and delineating those tree canopy areas affected by land disturbing or development activities may be permitted.
 - c. Such aerial photo shall be date stamped, so as to ensure that the photo is no more than two (2) years old and was taken during a season in which foliage is in bloom.
- 11. Reduced Tree Survey Requirements

In specific situations, Tree Survey or Tree Canopy Delineation requirements may be reduced as follows:

 - a. A non-disturbance area may be designated on the Tree Survey or tree canopy delineation plan.
 - b. Trees within the non-disturbance area are not required to be individually identified on the tree survey.
 - c. A proposed exemption area may be identified on the tree survey. The exemption area corresponds to areas of the site specifically exempted from the tree replacement and protection requirements of this Section.
 - d. Trees within proposed exemption areas are not required to be individually identified on the tree survey.
- 12. Tree Protection During Construction
 - a. All requirements of the tree protection plan shall be shown graphically on all applicable sheets within construction plans.
 - b. Unless otherwise approved in writing by the Director of Development Services, the following procedures shall be followed on all construction projects.
 - i. Tree Flagging. All protected trees on the subject property within 50 feet of a construction area or surface improvements such as driveways and walks, shall be flagged with bright florescent orange vinyl tape wrapped around the main trunk at a height of four (4) feet or more, such that the tape is very visible to workers operating construction equipment.
 - ii. Open Space Flagging. All trees or groups of trees within areas intended to be saved as open space shall be enclosed with fluorescent orange tape along all areas of possible access or



intrusion by construction equipment. Tape shall be supported at a minimum of 25 foot intervals by wrapping trees or utilizing another approved method. Single incident access for the purposes of clearing underbrush is allowed.

- iii. Protective Fencing. In those situations where a protected tree is so close to the construction area that construction equipment will infringe on the root system, a protective fencing may be required between the tree and the construction activity.
- iv. Bark Protection. In situations where a protected tree remains in the immediate area of intended construction, the tree shall be protected by enclosing the entire circumference of the tree with a two (2) inch x four (4) inch lumber encircled with wire or other means that do not damage the tree in order to protect the bark of the tree against incidental contact by large construction equipment.
- v. Boring. Boring of utilities under protected trees may be required in certain circumstances. When required, the length of the bore shall be the width of the critical root zone at a minimum, and shall be at a minimum depth of 48 inches.
- vi. Grade Change. Grade changes within the critical root zone of a protected tree should not exceed two (2) inches. If more than 25 percent of the critical root zone is disturbed by trenching or a grade change greater than two (2) inches, the [Applicant](#) may be required to prune the root zone or tree canopy per industry standards or take some other mitigative measure to help preserve the health of the tree.
- vii. Trenching. All trenching, where possible, shall be designed to avoid crossing the critical root zone of any protected tree.
- viii. Root Pruning. It is recommended that all roots two (2) inches or larger in diameter which are exposed as a result of trenching or other excavation shall be cut off square with a sharp, medium tooth saw and covered with pruning compound within two (2) hours of initial exposure.

13. Prohibited Construction or Utility Activities Adjacent to Trees

The following activities are prohibited within the limits of the critical root zone of any protected tree subject to the requirements of this Section:

- a. Material Storage. No materials intended for use in construction, or waste materials accumulated due to excavation or demolition, shall be placed within the limits of the critical root zone of any protected tree.
- b. Equipment Cleaning/Liquid Disposal. No equipment shall be cleaned, or other liquids deposited or allowed to flow over land, within the limits of the critical root zone of a protected tree. This includes, without limitation, paint, oil, solvents, asphalt, concrete, mortar or similar materials.
- c. Tree Attachments. No signs, wires, or other attachments other than those of a protective nature shall be attached to any protected tree.
- d. Vehicular Traffic. No vehicular and/or construction equipment traffic or parking shall take place within the limits of the critical root zone of any protected tree other than on an existing street pavement. This restriction does not apply to single incident access within the critical root zone for purposes of clearing underbrush, establishing the building pad and associated lot grading, vehicular traffic necessary for routine utility maintenance or emergency restoration of utility service or routine mowing operations.
- e. Grade Changes. No grade changes in excess of four (4) inches (cut or fill) shall be allowed within the limits of the critical root zone of any protected tree unless adequate construction methods are utilized which have been approved by the Building Official.



- f. Impervious Parking. No paving with asphalt, concrete or other impervious materials in a manner which may reasonably be expected to kill a tree shall be placed within the limits of the critical root zone of a protected tree except as otherwise allowed in this Section.

14. Tree Removal Permit

a. Tree Removal Permit Application

The following standards apply to individual lots or public ways and must be submitted and approved prior to the removal of any protected tree in the Town unless the tree or activity is exempt under this Section.

b. Tree Removal Application

All requests for tree removal permits must be accompanied by an application and a graphic exhibit showing at least the following items. These requirements may be modified by the Director of Development Services as needed to administer this ordinance. An aerial photograph may be allowed if it clearly meets these requirements.

- i. Appropriate title for application
 - ii. Title block, identifying street address, lot and block, and subdivision name for the site, and the date of preparation
 - iii. North arrow, graphic and written scale in close proximity
 - iv. Name, address and phone of owner and person preparing the exhibit
 - v. Location of all ROW lines and public easements within 50 feet of the tree proposed for removal
 - vi. Location of all buildings, structures, pools, parking, and other improvements which are existing or intended on the lot and located within 50 feet of the tree proposed for removal
 - vii. Areas of proposed cut/fill and drainage flow line, if applicable
 - viii. Limits of construction line shown, if applicable
 - ix. Location of all protected tree(s) and thicket boundaries within 50 feet of any construction area, with a description of the size and types of trees
 - x. The location of all protected trees which are to be removed.
 - xi. DBH, Latin and common name of tree to be removed
 - xii. Location of any required replacement trees shown with caliper size and common name of tree.
- c. Upon receipt of the tree removal permit application, the Director of Development Services may take one (1) of the following actions:
- i. Deferral of Decision

The Director of Development Services may defer the approval of a tree removal permit to the [Planning & Zoning Commission](#) for any reason. All decisions made by the Commission shall be final.
 - ii. Approval

The Director of Development Services, or the Commission on referral or appeal, shall issue a tree removal permit if it is determined that the application meets one (1) of the following criteria:

 - (a) The tree constitutes a hazard to life or property which cannot be reasonably mitigated without removing the tree;



- (b) The tree is dying, dead, or diseased to the point that restoration is not practical; or
- (c) All reasonable efforts have been made to avoid removing the tree for purposes of development and removal cannot be avoided.

iii. Denial

The Director of Development Services, or the Commission on referral or appeal, shall deny an application for a tree removal permit if it is determined that:

- (a) Removal of the tree is not reasonably required in order to conduct anticipated activities; or
- (b) A reasonable accommodation can be made to preserve the tree.

d. Appeal of Decision

Any decision made by the Director of Development Services may be appealed to the [Planning & Zoning Commission](#). All appeals to the [Planning & Zoning Commission](#) shall be decided by majority vote and are final.

e. Permit Expiration

Permits for tree removal issued in connection with a [Building Permit](#), site plan, development plan, or [Preliminary Plat](#) shall be valid until such permit, plan, or plat expires. Permits for tree removal not issued in connection with any of the above items shall be void 180 days after the issue date on the permit.

15. Tree Replacement Requirements

- a. Following approval of a tree removal permit or tree protection plan, the [Applicant](#) shall replace the protected trees being removed with trees listed in the Town's Required Tree Listing.
- b. Tree Survey Replacement. A sufficient number of trees shall be planted to equal, in caliper, the diameter of the tree(s) removed.
- c. Tree Canopy Replacement. A sufficient number of trees shall be planted to equal the square footage of the canopy removed. For each tree planted, the credited canopy will be at normal maturity, based upon the following:
 - i. Large trees with a crown width of 50 feet in diameter will equate to 2,000 square feet measured 40 feet on center.
 - ii. Medium trees with a crown width of 30 feet in diameter will equate to 700 square feet measured 24 feet on center.
 - iii. Small trees with a crown width of 10 feet in diameter will equate to 100 square feet measured 8 feet on center.
- d. Replacement trees shall be located on the subject site prior to issuance of the first [Building Permit](#) for the property.
 - i. If this is not feasible, the [Town Manager](#) may allow replacement trees to be located on another property.
 - ii. If replacement is not possible on-site or on another property, funds must be contributed to the Tree Reforestation Fund, as provided for within [Section 3.06.03. D.17 Tree Reforestation Fund](#)
- e. Replacement trees shall not be planted in a location where the mature canopy of the tree will interfere with overhead utility lines or where the mature root zone will interfere with underground public utility lines.
- f. No trees shall be planted within 10 feet of a fire hydrant.



- g. All replacement trees shall be a species listed in the Town's Required Tree Listing and guaranteed for one (1) year from the date of final inspection and acceptance of the project.
 - h. Replacement trees shall be planted prior to the issuance of a [Certificate of Occupancy](#) or project release.
 - i. In cases where the prime planting time does not correspond with project completion, replacement tree plantings may take place after the project is released by the Town; provided that before project release, a fiscal security is posted in the amount equal to the prevailing rate for installed trees with a one (1) year guarantee.
 - j. Existing trees can be transplanted to meet the replacement requirements under the following conditions:
 - i. Trees of at least three (3) caliper inches are eligible for transplanting.
 - ii. Transplanted trees must be maintained in a healthy condition for a period of two (2) years. The developer who received the transplanting credit must replace trees that do not meet this criteria.
 - iii. Transplanted trees must be listed in the Tree Survey with the notation that they are being transplanted.
16. Alternative Compliance for Tree Replacement
- The [Town Council](#) may accept and approve a request for alternative compliance of the following requirements, based upon a finding that the proposed alternative is, at a minimum, equivalent to and meets the spirit and intent of this Section.
- a. Number of Required Replacement Trees
 - i. A reduction to the number of required replacement trees may be granted if xeriscape landscape design is used on the project.
 - ii. A written recommendation from a local registered landscape architect must accompany a request for a reduction to the number of required replacement trees.
17. Tree Reforestation Fund
- a. In situations in which it is not feasible to place the required number of replacement trees on either the subject property or an alternate site, the [Applicant](#) would need to make payment into the reforestation fund.
 - b. The amount provided shall be equivalent to 100 percent of the tree replacement costs. The standard value for tree replacement is \$150 per caliper inch (tree survey).
 - c. Should trees be removed without a permit, the fund amount shall be equivalent to 125 percent of the tree replacement cost.
 - d. The amount of payment that is required for each replacement tree should be calculated based on the fee schedule adopted by the Town.
 - e. No certificates of occupancy shall be issued for a site until the required payment has been made to the tree reforestation fund.
 - f. The funds shall be used solely for the purpose of purchasing and installing trees along public [Right-of-Way](#), public park land or any other Town-owned property.
 - g. Funds may also be utilized for the acquisition of wooded property that will remain in a naturalistic state in perpetuity.



18. Tree Maintenance

- a. No protected tree shall be pruned in a manner which significantly disfigures the tree or in a manner which would reasonably lead to the death of the tree.
- b. The owners of any tree adjacent to a public Right-of-Way shall be required to maintain a minimum clearance of 14 feet above the traveled surface or curb of a public street, Right-of-Way, alley or open space trail.
- c. The owners of any tree adjacent to a public Right-of-Way shall remove all dead, diseased or dangerous trees, or broken or decayed limbs that constitute a menace to the safety of the public.
- d. The Town shall have the right to prune trees overhanging the Right-of-Way as necessary to preserve the public safety.
- e. The Town may approve the pruning of a protected tree in cases where protected trees must be pruned to allow for construction or demolition of a structure.
- f. All pruning of protected trees by a franchise utility company to ensure the safe operation of such utility services will be allowed.
- g. A tree permit is not required for reasonable pruning performed or contracted to be performed by the owner of any tree adjacent to a public Right-of-Way.
- h. Trees that are severely damaged by storms or other natural causes or trees faced with obstructions where other pruning practices are impractical may be exempted from this Section at the determination of the Director of Development Services or their authorized designee.

Town of Sunnyvale, Texas
3.06.03 Tree Protection Standards

A. Purpose and Intent

To promote and protect the public health, safety, and general welfare of the community by providing for the regulation of planting, maintenance, and removal of trees located along rights-of-ways; within parks, open spaces, and floodplain areas; within public areas owned and controlled by the Town; and on private property. This Ordinance is specifically intended to:

1. Promote tree and tree canopy preservation through site design standards and by controlling indiscriminate removal of trees,
2. Contribute to the long-term viability of existing trees through their protection during land disturbing and land development activities; while balancing the rights of property owners with the overall interests of the community,
3. Promote environmental benefits such as improved stormwater retention, water and air quality, soil moisture, groundwater re-charge, and reduction in stormwater discharge and soil erosion,
4. Preserve trees as an important resource that enhances the quality of life and the general welfare of the Town; by promoting its unique character as well as the physical, historical, and aesthetic environment,
5. Provide health benefits as they relate to the cleansing and cooling of air, thus contributing to the physical and mental wellness of the community,
6. Promote environmental elements that increase property values, reduce energy costs, reduce the amount of pollutants entering streams, and provide elements that are crucial to establishment of a healthy local ecosystem,
7. Promote and protect the health, safety, and general welfare of the public by creating an environment that is aesthetically pleasing and promotes economic development through an enhanced quality of life,
8. Encourage the preservation of environmentally sensitive areas, such as natural areas, floodplains, and open spaces that protect and enhance the water quality, ecosystem, and aesthetic environment, and
9. Recognize the economic value added to properties with trees and tree canopy coverage are maintained and supplemented by new trees

B. Applicability

Except as otherwise provided in **Section 3.06.03.E. Exemptions**, the standards in Ordinance shall apply to real property within the corporate limits of the Town as follows:

1. **New Development:**
 - a. A zoning change application (with a concept plan) (residential and non-residential development);
 - b. All site plan applications for non-residential development;
 - c. All new subdivisions of land at the time of plat approval (preliminary, final, or replat);

- d. All building permit applications; and
 - e. All land disturbing and development activities.
2. **Expansions or Enlargements:** All expansions or enlargements shall be considered together within a two-year period:
- a. The entire site shall comply with the requirements of this section when:
 - i. The building area on a site is expanded by 50% or higher; or
 - ii. The addition or expansion requires the approval of a Special Use Permit (SUP) that includes a change in use.
 - b. The portion of the site being expanded shall comply with the requirements of this section when expansions or enlargements less than 50% of the existing building area are proposed.
3. **Agricultural Use:** Property that is being used for Agricultural operations under Tex. Agric. Code Sec. 251.002(1) shall be exempt from the Tree Replacement requirements in this ordinance if a Tree Removal Permit application meeting the following requirements is submitted and approved:
- a. Applicant shall provide a Tree Survey or Tree Canopy Delineation prior to removal of any trees on the site.
 - b. In case of any application for development (building permit, site plan, or plat application) is submitted to the Town; to change the use from Agricultural use on the property within 60 months of the approval of the Tree Removal Permit, the property shall be subject to the tree replacement requirements in **Section 3.06.03.G**.
 - c. The Tree Survey or Tree Canopy Delineation provided at the time of tree permit application shall be used to calculate the amount of tree replacement or mitigation required by this Ordinance.

C. Tree Protection Plan Process

- 1. **Tree Removal Permit Required:** No person engaged in any development activity shall cut down, destroy, move, remove, or effectively destroy through damaging (physically, chemically, or biologically), any protected tree located on private or public property, including but not limited to, within public Right-of-Way, easements, and franchise and other utility easements, nor shall any land be disturbed, graded or otherwise developed within the Town without first having obtained approval of a Tree Removal Permit as outlined in **Section 3.06.03 C.4.** below.
- 2. **Protected Trees:** Any tree 3" or higher in caliper size (Exhibit A: unless on the Noxious or Invasive Plant List) shall be deemed as a Protected Tree.
- 3. **Existing Tree Credits:**
 - a. Any Protected Tree may be credited based on the ratio in Table 3.06.03-1 toward meeting the new tree requirement of Sunnyvale UDO landscape requirements.

Table 3.06.03-1: Existing Tree Credit*	
Circumference of Existing Tree	Credit Against Tree Requirement
<6"	1.0 tree
6" to 15"	2.0 tree
16" to 30"	3.0 trees
31" and 45"	4.0 trees
46" and above	As approved on Tree Protection and Mitigation Plan
*When new trees are required to be planted to meet landscaping or tree replacement requirements, these protected trees may count towards such requirements.	

- b. A tree shall be considered protected if a minimum of 75 percent of the critical root zone is maintained at undisturbed natural grade and no more than 25 percent of the canopy is removed due to building encroachment.
 - c. Credit is granted for a protected tree or canopy area being saved only when it is clearly demonstrated by the Applicant that an improvement associated with the development has been designed to preserve a protected tree or canopy area.
4. **Tree Removal Permit Applications:** Shall be required for all applications for a development plan, site plan or subdivision plat and must be accompanied by a Tree Survey, Tree Canopy Delineation (in lieu of a Tree Survey) and/or a Tree Protection Plan as established in Table 3.06.03-2.

Table 3.06.03-2: Tree Removal Permit Applications	
Type of Development Application	Type of Plans Required
New Development	
Zoning Change Application (with a Concept Plan)	Tree Canopy Delineation <u>and</u> Tree Protection Plan
Site Plan Application	Tree Survey and Tree Protection Plan
All plat applications (Preliminary Plat, Final Plat, Replat)	Tree Survey and Tree Protection Plan
Building Permit	Approved Tree Survey* and Tree Protection Plan During Construction
Existing Development	
Building addition: Less than 50%	Tree Survey and Tree Protection Plan for the expansion area only
Building addition: 50% or higher	Tree Survey and Tree Protection Plan for the entire site

Table 3.06.03-2: Tree Removal Permit Applications	
Type of Development Application	Type of Plans Required
Removal of any protected tree or Land disturbance	Tree Removal Permit (with a Tree Survey or Tree Canopy Delineation)
*Not applicable if approved Tree Removal Permit has been received during site plan or plat approval process.	

5. If a landscape plan is required with the development or site plan, the Tree Survey or Tree Canopy Delineation and Tree Protection Plan shall be submitted with the landscape plan. The Tree Survey or Tree Canopy Delineation and Tree Protection Plan must include the information specified in **Section 3.06.03 D.** below.
6. Information required on all Tree Removal Permits: All requests for tree removal permits must be accompanied by an application and a graphic exhibit showing at least the following items:
 - a. Tree canopy delineation or tree survey as required in Table 3.06.03-2
 - b. Location of all ROW lines and public easements within 50 feet of the tree proposed for removal
 - c. Location of all buildings, structures, pools, parking, and other improvements which are existing or intended on the lot and located within 50 feet of the tree proposed for removal
 - d. Areas of proposed cut/fill and drainage flow line, if applicable
 - e. Limits of construction line shown, if applicable
 - f. Location of all protected tree(s) and thicket boundaries within 50 feet of any construction area, with a description of the size and types of trees
 - g. The location of all protected trees which are to be removed.
 - h. DBH, Latin and common name of tree to be removed
 - i. Location of any required replacement trees shown with caliper size and common name of tree.
7. Decision on Tree Removal Permits: Upon receipt of the Tree Removal permit application, the Director of Development Services may take one (1) of the following actions:
 - a. Deferral of Decision: The Director of Development Services may defer the approval of a tree removal permit to the Town Council for any reason. All decisions made by the Town Council shall be final.
 - b. Approval: The Director of Development Services, or the Town Council on referral or appeal, shall issue a tree removal permit if it is determined that the application meets one (1) of the following criteria:
 - i. The removal of the tree(s) is consistent with an approved Tree Survey and Tree Protection Plan;
 - ii. The tree constitutes a hazard to life or property which cannot be reasonably mitigated without removing the tree;
 - iii. The tree is dying, dead, or diseased to the point that restoration is not practical; or

- iv. All reasonable efforts have been made to avoid removing the tree for purposes of development and removal cannot be avoided.
- c. Denial: The Director of Development Services, or the Commission on referral or appeal, shall deny an application for a tree removal permit if it is determined that:
 - i. Removal of the tree is not reasonably required in order to conduct anticipated activities; or
 - ii. A reasonable accommodation can be made to preserve the tree.
- d. Appeal of Decision: Any decision made by the Director of Development Services may be appealed to the Town Council. All appeals to the Town Council shall be decided by majority vote and are final.
- e. Permit Expiration: Permits for tree removal issued in connection with a Building Permit, site plan, development plan, or Preliminary Plat shall be valid until such permit, plan, or plat expires. Permits for tree removal not issued in connection with any of the above items shall be void 180 days after the issue date on the permit.

D. Types of Tree Plans

- 1. **Tree survey:**
 - a. A tree survey and tree protection plan shall be required for development impact areas and shall accompany development applications as indicated in Table 3.06.03-2 above.
 - b. Each tree survey and tree protection plan shall contain, but not limited to, the following required elements:
 - i. The locations of all trees to be preserved, removed, and replaced on the subject site
 - ii. A table containing the following information for all trees:
 - 1) Tree number;
 - 2) Common name of each tree;
 - 3) Circumference of each protected tree;
 - 4) Diameter (dbh) of each tree;
 - 5) General health and condition of each tree;
 - 6) Average canopy spread;
 - 7) Classification (quality and type of tree – protected or noxious) and status (preserve or remove) for each tree; and
 - 8) Tree replacement worksheet based on credits applicable to protected trees in Table 3.06.03-1.
 - c. The tree survey and protection plan shall be prepared by or under the supervision of an ISA certified or ASCA registered arborist, a SAF certified forester, botanist, professional land surveyor that has documented completion of at least eight hours of training in Texas tree identification, or a registered landscape architect.
 - d. Residential subdivisions that are to be developed in phases must provide a plan that complies with the preservation requirements at full build-out as approved on the preliminary plat.

- e. Any subsequent redevelopment of the property shall preserve the minimum percentage dbh inches as indicated by the initial tree survey and preservation plan.
 - f. A notation must be placed on the preliminary plat, final plat, site plan, and building permit identifying the dbh of trees to be preserved and the location of the lots that contain the preserved trees. The notation shall limit any future unauthorized land disturbing activity or construction that would impact and/or damage the tree(s) preserved.
 - g. A tree survey and preservation plan shall follow **Section 3.06.03 C. 7** above for the decision-making process.
2. **Tree Canopy Delineation:** Tree Canopy Delineation shall include (See Figure 3.06.03-1):
- a. Aerial photography of the subject properties that contain a wooded area(s), in lieu of a Tree Survey.
 - b. Authorization for submittal of an aerial photograph accompanied by a transparent plan of the development at the same scale as the photograph showing all non-disturbance areas, proposed exemption areas, and delineating those tree canopy areas affected by land disturbing or development activities may be permitted.
 - c. Such aerial photo shall be date stamped, so as to ensure that the photo is no more than two (2) years old and was taken during a season in which foliage is in bloom.
 - d. A non-disturbance area may be designated on the tree canopy delineation plan.
 - e. Trees within the non-disturbance area are not required to be individually identified.
 - f. A proposed exemption area may be identified on the plan. The exemption area corresponds to areas of the site specifically exempted from the tree replacement and protection requirements of this Ordinance.
 - g. Trees within proposed exemption areas are not required to be individually identified on the plan.



Figure 3.06.03-1: Example of a Plan Showing Tree Canopy Delineation

3. **Tree Protection Plans:** Unless otherwise approved in writing by the Director of Development Services, the following procedures shall be followed on all construction projects.
 - a. **Tree Flagging.** All protected trees on the subject property within 50 feet of a construction area or surface improvements such as driveways and walks, shall be flagged with bright florescent orange vinyl tape wrapped around the main trunk at a height of four (4) feet or more, such that the tape is very visible to workers operating construction equipment.
 - b. **Open Space Flagging.** All trees or groups of trees within areas intended to be saved as open space shall be enclosed with fluorescent orange tape along all areas of possible access or intrusion by construction equipment. Tape shall be supported at a minimum of 25-foot intervals by wrapping trees or utilizing another approved method. Single incident access for the purposes of clearing underbrush is allowed.
 - c. **Protective Fencing.** In those situations where a protected tree is so close to the construction area that construction equipment will infringe on the root system, a protective fencing may be required between the tree and the construction activity.
 - d. **Bark Protection.** In situations where a protected tree remains in the immediate area of intended construction, the tree shall be protected by enclosing the entire circumference of the tree with a two (2) inch x four (4) inch lumber encircled with wire or other means that do not damage the tree in order to protect the bark of the tree against incidental contact by large construction equipment.
 - e. **Boring.** Boring of utilities under protected trees may be required in certain circumstances. When required, the length of the bore shall be the width of

the critical root zone at a minimum, and shall be at a minimum depth of 48 inches.

- f. **Grade Change.** Grade changes within the critical root zone of a protected tree should not exceed two (2) inches. If more than 25 percent of the critical root zone is disturbed by trenching or a grade change greater than two (2) inches, the Applicant may be required to prune the root zone or tree canopy per industry standards or take some other mitigative measure to help preserve the health of the tree.
 - g. **Trenching.** All trenching, where possible, shall be designed to avoid crossing the critical root zone of any protected tree.
 - h. **Root Pruning.** It is recommended that all roots two (2) inches or larger in diameter which are exposed as a result of trenching or other excavation shall be cut off square with a sharp, medium tooth saw and covered with pruning compound within two (2) hours of initial exposure.
4. **Prohibited Activities During Construction or Utility Activities:** The following activities are prohibited within the limits of the critical root zone of any protected tree subject to the requirements of this Section:
- a. **Material Storage.** No materials intended for use in construction, or waste materials accumulated due to excavation or demolition, shall be placed within the limits of the critical root zone of any protected tree.
 - b. **Equipment Cleaning/Liquid Disposal.** No equipment shall be cleaned, or other liquids deposited or allowed to flow over land, within the limits of the critical root zone of a protected tree. This includes, without limitation, paint, oil, solvents, asphalt, concrete, mortar or similar materials.
 - c. **Tree Attachments.** No signs, wires, or other attachments other than those of a protective nature shall be attached to any protected tree.
 - d. **Vehicular Traffic.** No vehicular and/or construction equipment traffic or parking shall take place within the limits of the critical root zone of any protected tree other than on an existing street pavement. This restriction does not apply to single incident access within the critical root zone for purposes of clearing underbrush, establishing the building pad and associated lot grading, vehicular traffic necessary for routine utility maintenance or emergency restoration of utility service or routine mowing operations.
 - e. **Grade Changes.** No grade changes in excess of four (4) inches (cut or fill) shall be allowed within the limits of the critical root zone of any protected tree unless adequate construction methods are utilized which have been approved by the Building Official.
 - f. **Impervious Parking.** No paving with asphalt, concrete or other impervious materials in a manner which may reasonably be expected to kill a tree shall be placed within the limits of the critical root zone of a protected tree except as otherwise allowed in this Section.

E. Exemptions

The requirements specified in this Ordinance, including the requirement for a Tree Removal Permit shall not be required in the following circumstances:

1. Damaged/Diseased Trees. The tree is dead, diseased, damaged beyond the point of recovery, or in danger of falling as determined by a certified arborist.
2. Property on which an occupied, single-family dwelling unit exists, except trees designated for preservation on an approved Tree Protection Plan shall be preserved unless otherwise exempt by TLGC 212.905, as amended.
3. Public Safety. The tree creates unsafe vision clearance, conflicts with other ordinances and regulations, or the tree is determined to be in a hazardous or dangerous condition, resulting in a danger to public health, safety or welfare.
4. Utility Service Interruption. The tree has disrupted a public utility service due to tornado, flood, or another natural act. Removal shall be limited to the part of the tree which is found necessary to re-establish and maintain the utility service.
5. Utility Companies, Utility Service, and Distribution/Transmission Lines. Utility companies (public and private) shall not be subject to the tree protection or replacement requirements in this ordinance when establishing distribution and transmission lines. When establishing new utility service, services should be routed between the service pole or transmission and distribution lines and the building being served in a manner that does not require the removal of protected trees. All rights of ways, easements or similar types of public property maintained by utility companies shall not be subject to the tree protection or replacement requirements.
6. Street Dedications. Newly dedicated right-of-way (ROW), as defined by this Ordinance, necessary for the orderly and efficient development of property.
7. Licensed Plant or Tree Nursery. The tree is located on the property of a licensed plant or tree nursery, in which trees planted and growing on the premises are for the sale or intended sale to the general public in the ordinary course of business.
8. Any tree listed on the Texas Department of Agriculture Noxious and Invasive Plant List (Exhibit A).

F. Prohibited Activities

1. Clear Cutting: Clear-cutting of land is the practice of cutting down most or all of the trees on a property at the same time.
2. Tree Topping: Tree topping is the severe cutting back of branches to stubs larger than three (3) inches in diameter within the tree's canopy to such a degree as to remove the normal canopy and disfigure the tree.
3. Removal Without a Permit: Removal of any protected trees without a Tree Removal Permit unless otherwise exempt by this Ordinance.

G. Tree Replacement Requirements

1. **General Requirements:**
 - a. Following approval of a tree removal permit or tree protection plan, the Applicant shall replace the protected trees being removed with trees listed in the Town's Required Tree and Plant List (Exhibit B).
 - b. **Replacement based on Tree Survey:** A sufficient number of trees shall be planted to equal, in caliper, the diameter of the tree(s) removed. Credits

for protected trees that are to remain shall be based on Table 3.06.03-1. Existing Tree Credits.

- c. **Replacement based on Tree Canopy Delineation:** For properties that change from Agricultural use to other use under Section 3.06.03.B.3., tree replacement shall be equal the square footage of the canopy removed. For each tree planted, the credited canopy will be at normal maturity, based upon the following:
 - i. Large trees with a crown width of 50 feet in diameter will equate to 2,000 square feet measured 40 feet on center.
 - ii. Medium trees with a crown width of 30 feet in diameter will equate to 700 square feet measured 24 feet on center.
 - iii. Small trees with a crown width of 10 feet in diameter will equate to 100 square feet measured 8 feet on center.
- d. Replacement trees shall be located on the subject site prior to issuance of the first Building Permit for the property.
 - i. If this is not feasible, the Town Manager may allow replacement trees to be located on another property.
 - ii. If replacement is not possible on-site or on another property, funds must be contributed to the Tree Reforestation Fund, as provided for within Section **3.06.03. H.** Tree Reforestation Fund
- e. **Standards for Replacement Trees:**
 - i. Replacement trees shall not be planted in a location where the mature canopy of the tree will interfere with overhead utility lines or where the mature root zone will interfere with underground public utility lines.
 - ii. No trees shall be planted within 10 feet of a fire hydrant.
 - iii. All replacement trees shall be guaranteed for one (1) year from the date of final inspection and acceptance of the project.
 - iv. Replacement trees shall be planted prior to the issuance of a Certificate of Occupancy or filing of a final plat in case of a subdivision plat.
 - v. In cases where the prime planting time does not correspond with project completion, replacement tree plantings may take place after the project is released by the Town; provided that before project release, a fiscal security is posted in the amount equal to the prevailing rate for installed trees with a one (1) year guarantee.
- f. Existing trees can be transplanted to meet the replacement requirements under the following conditions:
 - i. Trees of at least three (3) caliper inches are eligible for transplanting.
 - ii. Transplanted trees must be maintained in a healthy condition for a period of two (2) years. The developer who received the

transplanting credit must replace trees that do not meet these criteria.

2. Transplanted trees must be listed in the Tree Survey with the notation that they are being transplanted.
3. **Tree Planting on Residential Lots:** Prior to issuance of a Certificate of Occupancy, the developer or builder of a residential lot shall plant a sufficient number of trees on the lot to assure that the following numbers of trees exist on the site:

Table 3.06.03-3: Minimum Number of Trees	
Lot Size	Number of Trees
1 acre or larger	3
Less than 1 acre	2

H. Tree Reforestation Fund

1. In situations in which it is not feasible to place the required number of replacement trees on either the subject property or an alternate site, the Applicant would need to make payment into the reforestation fund.
 - a. The amount provided shall be equivalent to 100 percent of the tree replacement costs. **The standard value for tree replacement is \$200 per caliper inch as measured in the tree survey.**
 - b. No certificates of occupancy shall be issued for a site until the required payment has been made to the tree reforestation fund.
 - c. The funds shall be used solely for the purpose of purchasing and installing trees along public Right-of-Way, public park land or any other Town-owned property.
2. **Should trees be removed without a permit, the fund amount shall be \$250 per caliper inch removed as would be measured in the tree survey.** Additionally, mitigation will be required as stated in **Section 3.06.03.G**.
3. Funds may also be utilized for the acquisition of wooded property that will remain in a naturalistic state in perpetuity.

I. Tree Maintenance and Enforcement:

1. If a replacement tree dies within three years from the date it was planted, the person subject to the original requirement to plant the tree must replace the dead tree with another replacement tree within ninety (90) days of the order of the Director of Development Services ordering the replanting. This requirement to replace dead trees shall be binding even if such person sells, assigns, or transfers the property.
2. **Trees in the Right-of-Way:**
 - a. Maintenance Responsibility:
 - i. Street trees shall be maintained by the adjoining property owner

- ii. It is the adjoining property owner's responsibility to water, prune, fertilize, and treat for insect and disease, as may be deemed necessary. All incurred costs are to be borne by the adjoining property owner.
 - b. Tree Canopy Height Clearance: Street trees shall be pruned as required under I.3.b below.
 - c. The owners of any tree adjacent to a public Right-of-Way shall remove all dead, diseased or dangerous trees, or broken or decayed limbs that constitute a menace to the safety of the public.
 - d. The Town shall have the right to prune trees overhanging the Right-of-Way as necessary to preserve the public safety.
3. **Tree Pruning Standards:**
- a. Pruning Technique: All pruning shall be conducted in accordance with the most recent Arboricultural Specifications and Standards of Practice of the International Society of Arboriculture as published from time to time by the American National Standard for Tree Care Operations (ANSI A300).
 - b. Required Pruning: The owner of land abutting on any public street right-of-way shall be required to provide reasonable and routine care of trees and vegetation in or adjacent to the right-of-way, and shall promptly take action to remove all dead, diseased or hazardous trees, or broken or decayed limbs which may constitute a threat or danger to the safety of the public. Such owners shall maintain a minimum clearance of fourteen feet (14') above the traveled pavement or curb of a public street or as approved by the Fire Marshal and a clearance of eight feet (8') above the surface of a sidewalk.
 - c. Ground Level Cuts: Where protected tree removal is allowed by this Ordinance, but the root system of the tree to be removed is intertwined with the root system of any protected tree whose removal is prohibited by this Ordinance, the tree shall be removed by flush cutting with the natural level of the surrounding ground. Where stump removal is also desired, stump grinding shall be allowed or, upon written approval by the Director of Development Services, a trench may be cut between the two trees sufficient to cut the roots near the tree to be removed, thereby allowing removal of the remaining stump with minimal damage to the root system of the tree to be saved.
 - d. No protected tree shall be pruned in a manner which significantly disfigures the tree or in a manner which would reasonably lead to the death of the tree.
 - e. The Town may approve the pruning of a protected tree in cases where protected trees must be pruned to allow for construction or demolition of a structure.
 - f. All pruning of protected trees by a franchise utility company to ensure the safe operation of such utility services will be allowed.
 - g. A tree permit is not required for reasonable pruning performed or contracted to be performed by the owner of any tree adjacent to a public Right-of-Way.

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- h. Trees that are severely damaged by storms or other natural causes or trees faced with obstructions where other pruning practices are impractical may be exempted from this Ordinance at the determination of the Director of Development Services or their authorized designee.
- 4. **Irrigation Standards:** All new replacement trees planted to meet the requirements of this Ordinance shall meet the maintenance and irrigation standards in Section 3.06.02. B.8 Landscape Maintenance Requirements.

EXHIBIT A: INVASIVE AND NOXIOUS TREES AND PLANT LIST[#]

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
Bois d'Arc	<i>Maclura pomifera</i> female only	Alligator weed	<i>Alternanthera philoxeroides</i>
Cottonwood	<i>Populus deltoides</i>	bBalloonvine	<i>Cardiospermum halicacabum</i>
Chinaberry	<i>Melia azedoarach</i>	Broomrape	<i>Orobanche ramosa</i>
Hackberry	<i>Celtis occidentalis laevigata</i>	Camelthorn	<i>Alhagi camelorum</i>
Honeylocust	<i>Gleditsia triacanthos</i>	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Mesquite	<i>Prosopis glandulosa</i>	Giant duckweed	<i>Spirodela oligorrhiza</i>
Mulberry	<i>Morus alba</i>	Giant reed	<i>Arundo donax</i>
Tree of Heaven	<i>Ailanthus altissima</i>	Hedge bindweed	<i>Calystegia sepium</i>
Black Willow	<i>Salix nigra</i>	Hydrilla	<i>Hydrilla verticillata</i>
Brazilian Peppertree	<i>Schinus terebinthifolius</i> Raddi	Itchgrass	<i>Rottboellia cochinchinensis</i>
Chinese Tallow Tree	<i>Triadica sebifera</i>	Japanese dodder	<i>Cuscuta japonica</i>
Paperbark	<i>Melaleuca quinquenervia</i>	Kudzu	<i>Pueraria montana</i> var. <i>lobata</i>
Saltcedar	<i>Tamarix spp.</i>	Lagarosiphon	<i>Lagarosiphon major</i>
Japanese climbing fern	<i>Lygodium japonicum</i>	Ppurple loosestrife	<i>Lythrum salicaria</i>
Torpedograss	<i>Panicum repens</i>	Rooted water hyacinth	<i>Eichhornia azurea</i>
Tropical soda apple	<i>Solanum viarum</i>	Salvinia	<i>Salvinia spp.</i>
Water spinach	<i>Ipomoea aquatica</i>	Serrated tussock	<i>Nassella trichotoma</i>
Water hyacinth	<i>Pontederia crassipes</i>	Water lettuce	<i>Pistia stratiotes</i>

[#]Due to the proximity of the Town to Lake Ray Hubbard and to protect Town parks, all trees and plants on the Texas Department of Agriculture Noxious Plant List (TAC §19.300(a)) may be removed without a permit.

EXHIBIT B: Required Tree and Plant List**

SHADE TREES	SCIENTIFIC NAME	CROWN WIDTH	HEIGHT
Afghan Pine	<i>Pinus eldarica</i>	15-20'	30-50'
Ash, Texas*	<i>Fraxinus texensis</i>	20-40'	30-45'
Boxelder	<i>Acer negundo</i>	35-50'	50-75'
Catalpa	<i>Catalpa bignonioides</i>	30-50'	40-60'
Cherry-laurel	<i>Prunus caroliniana</i>	15-20'	20-40'
Chinese Pistache	<i>Pistacia chinensis</i>	20-30'	30-35'
Chittamwood*	<i>Sideroxylon lanuginosum</i>	30-40'	50-60'
Common Persimmon*	<i>Diospyros virginiana</i>	20-30'	40-50'
Cypress, Arizona	<i>Cupressus arizonica</i>	10-20'	20-50'
Cypress, Bald*	<i>Taxodium distichum</i>	40-50'	40-75'
Deodar Cedar	<i>Cedrus deodara</i>	40-50'	40-70'
Elm, American*	<i>Ulmus americana</i>	40-60'	50-70'
Elm, Cedar*	<i>Ulmus crassifolia</i>	30-50'	40-70'
Elm, Lacebark	<i>Ulmus parvifolia</i>	30-50'	40-60'
Gum Bumelia	<i>Bumelia lanuginosa</i>	30-50'	40-80'
Linden Tree (Basswood)	<i>Tilia americana</i>	30-50'	50-70'
Maple, Caddo	<i>Acer barbatum</i> var. <i>caddo</i>	30-40'	40-50'
Oak, Bigelow (Scrub Oak)*	<i>Quercus sinuata</i> var. <i>breviloba</i>	10-35'	10-40'
Oak, Bur*	<i>Quercus macrocarpa</i>	40-70'	40-70'
Oak, Chinquapin*	<i>Quercus muehlenbergii</i>	30-50'	40-70'
Oak, Compton's	<i>Quercus comptoniae</i>	40-50'	40-60'
Oak, Durand*	<i>Quercus durandii</i>	40-50'	40-60'
Oak, Live*	<i>Quercus virginiana</i>	40-60'	40-60'
Oak, Shumard*	<i>Quercus shumardii</i>	30-70'	40-80'
Oak, Southern Red	<i>Quercus falcata</i>	30-70'	40-75'
Oak, Texas Red*	<i>Quercus buckleyi</i> (texana)	30-50'	40-50'
Pistache, Chinese	<i>Pistacia chinensis</i>	20-30'	40-60'
Pecan*	<i>Carya illinoensis</i>	30-70'	40-80'
Southern Magnolia*	<i>Magnolia grandiflora</i>	30-60'	60-80'
Soapberry, Western*	<i>Sapindus drummondii</i>	30-40'	40-50'
Sycamore	<i>Platanus occidentalis</i>	30-60'	45-75'
Sycamore, Mexican	<i>Platanus mexicana</i>	30-60'	45-75'
Walnut, Black	<i>Juglans nigra</i>	30-50'	40-70'

ORNAMENTAL TREES	SCIENTIFIC NAME	CROWN WIDTH	HEIGHT
Althea (Rose of Sharon)	<i>Hibiscus syriacus</i>	6-10'	8-12'
Bird of Paradise	<i>Caesalpinia gilliesii</i>	7-10'	7-10'
Buckeye, Mexican*	<i>Ungnadia speciosa</i>	15'	20'
Buckeye, Red*	<i>Aesculus pavia</i>	12'	25'
Buckeye, Texas*	<i>Aesculus arguta</i>	12'	40'
Carolina Buckthorn*	<i>Rhamnus caroliniana</i>	15'	15'
Crepe Myrtle, Cinnamon Bark	<i>Lagerstroemia fauriei</i>	15'	20'
Crepe Myrtle (tree form)	<i>Lagerstroemia indica</i>	15'	20'
Desert Willow*	<i>Chilopsis linearis</i>	15'	20-25'
Eastern Red Cedar*	<i>Juniperus virginiana</i>	20'	40'
Eve's Necklace*	<i>Sophora affinis</i>	15'	20'
Hawthorn*	<i>Crataegus spp.</i>	15'	20'
Holly, Possumhaw*	<i>Ilex decidua</i>	15'	20'
Holly, Yaupon*	<i>Ilex vomitoria</i>	20'	20'
Japanese Black Pine	<i>Pinus thunbergiana</i>	12-20'	20-60'
Juniper, Blue Point	<i>Juniperus chinensis 'Blue Point'</i>	8'	15'
Juniper, Hollywood	<i>Juniperus chinensis 'Torulosa'</i>	10'	15'
Juniper, Wichita Blue	<i>Juniperus scopulorum 'Wichita'</i>	8'	18'
Magnolia, Little Gem	<i>Magnolia grandiflora 'Little Gem'</i>	8-10'	15-20'
Magnolia, Saucer	<i>Magnolia x soulangeana</i>	20-25'	20-25'
Mexican Plum*	<i>Prunus mexicana</i>	15-20'	15-20'
Oak, Lacey*	<i>Quercus glaucooides</i>	15-20'	25-30'
Pomegranate	<i>Punica granatum</i>	10'	15'
Possumhaw Holly*	<i>Ilex decidua</i>	15'	20'
Prairie Flameleaf Sumac*	<i>Rhus lanceolata</i>	20'	15-20'
Redbud, Eastern*	<i>Cercis canadensis var. texensis</i>	15-20'	15-20'
Redbud, Mexican*	<i>Cercis canadensis var. mexicana</i>	10-15'	10-15'
Roughleafed Dogwood*	<i>Cornus drummondii</i>	15'	15'
Rusty Blackhaw Viburnum*	<i>Viburnum rufidulum</i>	15-35'	10-30'
Texas Kidneywood*	<i>Eysenhardtia texana</i>	8-10'	8-10'
Texas Mountain Laurel*	<i>Sophora secundiflora</i>	10-15'	15-20'
Texas Persimmon*	<i>Diospyros texana</i>	12'	20'

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ORNAMENTAL TREES	SCIENTIFIC NAME	CROWN WIDTH	HEIGHT
Toothache Tree*	<i>Zanthoxylum clava-herculis</i>	15'	20'
Vitex	<i>Vitex agnus-castus</i>	5-20'	8-20'
Walnut, Texas*	<i>Juglans microcarpa</i>	15-20'	20-25'
Wax Myrtle*	<i>Myrica cerifera</i>	10'	15-18'
Japanese, Maple	<i>Acer palmatum</i>	15'-33'	20'-30'

SHRUBS	SCIENTIFIC NAME
Abelia, Glossy	<i>Abelia x. grandiflora</i> var.
Agarita*	<i>Mahonia trifoliolata</i>
Althea (Rose of Sharon - shrub)	<i>Hibiscus syriacus</i>
American Beautyberry*	<i>Callicarpa americana</i>
Apache Plume, Ponil	<i>Fallugia paradoxa</i>
Barberry	<i>Berberis gracilis</i>
Barberry, Crimson Pygmy	<i>Berberis thunbergii</i> 'Crimson Pygmy'
Bridal Wreath Spiraea	<i>Spiraea prunifolia</i>
Burning Bush (Dwarf)	<i>Euonymus alatus</i> 'Compacta'
Cherry Laurel, Compact	<i>Prunus caroliniana</i> 'compacta'
Cleyera	<i>Cleyera japonica</i>
Coral Berry*	<i>Symphoricarpos orbiculatus</i>
Crepe Myrtle (Semi-Dwarf)	<i>Lagerstroemia indica</i>
Crepe Myrtle (Dwarf)	<i>Lagerstroemia indica</i>
Crepe Myrtle, Miniature	<i>Lagerstroemia indica</i>
Dwarf Pomegranate	<i>Punica granatum</i>
Dwarf Spirea	<i>Spiraea</i> spp.
Elaeagnus	<i>Elaeagnus pungens</i> 'Fruitlandii'
Forsythia (Elbow Bush)*	<i>Forestiera</i>
Flowering Quince	<i>Chaenomeles japonica</i>
Fragrant Mimosa*	<i>Mimosa borealis</i>
Holly, Burford	<i>Ilex cornuta burfordii</i>
Holly, Burford (Dwarf)	<i>Ilex cornuta burfordii</i> 'Pygmy'
Holly, Foster	<i>Ilex x attenuata</i> 'Fosteri'
Holly, Nellie R Stevens	<i>Ilex x.</i> 'Nellie R. Stevens'
Holly, Yaupon (Dwarf)*	<i>Ilex vomitoria</i>
Holly, Chinese (Dwarf)	<i>Ilex cornuta</i> 'Rotunda'
Honeysuckle, Texas*	<i>Lonicera albiflora</i>
Honeysuckle, Winter/Bush	<i>Diervilla sessilifolia</i>
Hypericum	<i>Hypericum</i> spp.
Italian Jasmine	<i>Jasmine nudiflorum</i>
Indian Jasmine	<i>Jasminum sambac</i>
Japanese Aucuba	<i>Aucuba japonica</i>
Mahonia, Leatherleaf	<i>Berberis bealei</i>
Mahonia, Soft Caress	<i>Mahonia eurybracteata</i> 'Soft Caress'
Mazari Palm	<i>Nannorrhops ritchiana</i>
Nandina, Compact	<i>Nandina domestica</i> 'Compact'
Nandina, Harbor Dwarf	<i>Nandina domestica</i> 'Harbour Dwarf'

SHRUBS	SCIENTIFIC NAME
Nandina, Standard	<i>Nandina domestica</i>
Nolina, Lindheimer*	<i>Nolina lindheimeri</i>
Nolina, Texas*	<i>Nolina texana</i>
Oakleaf Hydrangea	<i>Hydrangea quercifolia</i>
Palmetto, Dwarf*	<i>Sabal minor</i>
Photinia, Chinese (TX adapted)	<i>Photinia serrulata</i>
Purpleleaf, Japanese	<i>Berberis thunbergii</i> 'Atropurpurea'
Sage, Texas*	<i>Leucophyllum</i> var.
Sotol, Texas*	<i>Dasylirion texanum</i>
Sotol, Wheeler*	<i>Dasylirion wheeleri</i>
Sumac, Aromatic	<i>Rhus aromatica</i>
Sumac, Evergreen*	<i>Rhus virens</i>
Sumac, Smooth*	<i>Rhus glabra</i>
Wax Myrtle (Dwarf)*	<i>Myrica pusilla</i>
Yucca*	<i>Yucca</i> var.
Yucca, Red*	<i>Hesperaloe parviflora</i>

* Indicates native species

** The use of alternative species that are native and drought tolerant may be permitted with the approval of the Director of Development Services.

For more information:

<http://texastreeid.tamu.edu/index.aspx> - Trees of Texas, Texas A&M Forest Service

<https://plants.sc.egov.usda.gov/java/> - USDA Plants Database

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Town of Sunnyvale, Texas 3.06.03 Tree Protection Standards

*[Text within these brackets indicate annotations on the changed text in the ordinance]
[Global changes: all references to Section have been changed to Ordinance]*

A. Purpose and Intent

To promote and protect the public health, safety, and general welfare of the community by providing for the regulation of planting, maintenance, and removal of trees located along rights-of-ways; within parks, open spaces, and floodplain areas; within public areas owned and controlled by the Town; and on private property. This Ordinance is specifically intended to:

1. Promote tree and tree canopy preservation through site design standards and by controlling indiscriminate removal of trees,
2. Contribute to the long-term viability of existing trees through their protection during land disturbing and land development activities; while balancing the rights of property owners with the overall interests of the community,
3. Promote environmental benefits such as improved stormwater retention, water and air quality, soil moisture, groundwater re-charge, and reduction in stormwater discharge and soil erosion, [added goal]
4. Preserve trees as an important resource that enhances the quality of life and the general welfare of the Town; by promoting its unique character as well as the physical, historical, and aesthetic environment,
5. Provide health benefits as they relate to the cleansing and cooling of air, thus contributing to the physical and mental wellness of the community,
6. Promote environmental elements that increase property values, reduce energy costs, reduce the amount of pollutants entering streams, and provide elements that are crucial to establishment of a healthy local ecosystem,
7. Promote and protect the health, safety, and general welfare of the public by creating an environment that is aesthetically pleasing and promotes economic development through an enhanced quality of life,
8. Encourage the preservation of environmentally sensitive areas, such as natural areas, floodplains, and open spaces that protect and enhance the water quality, ecosystem, and aesthetic environment, and
9. Recognize the economic value added to properties with trees and tree canopy coverage are maintained and supplemented by new trees

B. Applicability *[name of this section has been changed]*

Except as otherwise provided in **Section 3.06.03.E. Exemptions**, the standards in Ordinance shall apply to real property within the corporate limits of the Town as follows:

1. New Development: *[This section has been reorganized and retitled from Section 3.06.03.B]*
 - a. A zoning change application (with a concept plan) (residential and non-residential development);

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- b. All site plan applications for non-residential development;
 - c. All new subdivisions of land at the time of plat approval (preliminary, final, or replat);
 - d. All building permit applications; and
 - e. All land disturbing and development activities.
2. **Expansions or Enlargements:** All expansions or enlargements shall be considered together within a two-year period:
- a. The entire site shall comply with the requirements of this section when:
 - i. The building area on a site is expanded by 50% or higher; or
 - ii. The addition or expansion requires the approval of a Special Use Permit (SUP) that includes a change in use.
 - b. The portion of the site being expanded shall comply with the requirements of this section when expansions or enlargements less than 50% of the existing building area are proposed. *[added language]*
3. **Agricultural Use:** Property that is being used for Agricultural operations under Tex. Agric. Code Sec. 251.002(1) shall be exempt from the Tree Replacement requirements in this ordinance if a Tree Removal Permit application meeting the following requirements is submitted and approved:
- a. Applicant shall provide a Tree Survey or Tree Canopy Delineation prior to removal of any trees on the site.
 - b. In case of any application for development (building permit, site plan, or plat application) is submitted to the Town; to change the use from Agricultural use on the property within 60 months of the approval of the Tree Removal Permit, the property shall be subject to the tree replacement requirements in **Section 3.06.03.G**.
 - c. The Tree Survey or Tree Canopy Delineation provided at the time of tree permit application shall be used to calculate the amount of tree replacement or mitigation required by this Ordinance. *[This section moved and enhanced from Section 3.06.03.C.1.a.]*

C. **Tree Protection Plan Process** *[moved from Section 3.06.03.D]*

- 1. **Tree Removal Permit Required:** No person engaged in any development activity shall cut down, destroy, move, remove, or effectively destroy through damaging (physically, chemically, or biologically), any protected tree located on private or public property, including but not limited to, within public Right-of-Way, easements, and franchise and other utility easements, nor shall any land be disturbed, graded or otherwise developed within the Town without first having obtained approval of a Tree Removal Permit as outlined in **Section 3.06.03 C.4.** below.
- 2. Protected Trees: Any tree 3" or higher in caliper size (Exhibit A: unless on the Noxious or Invasive Plant List) shall be deemed as a Protected Tree. *[added language]*
- 3. **Existing Tree Credits:** *[Original Section 3.06.03.D.4]*

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- a. Any Protected Tree may be credited based on the ratio in Table 3.06.03-1 toward meeting the new tree requirement of Sunnyvale UDO landscape requirements.

Table 19: Tree Credit	
Circumference of Existing Tree	Credit Against Tree Requirement
6" to 8"	1.0 tree
9" to 30"	1.5 trees
31" to 46"	2.0 trees
47" or more	3.0 trees

[Original Tree Credit table above]

Table 3.06.03-1: Existing Tree Credit*	
Circumference of Existing Tree	Credit Against Tree Requirement
<u><6"</u>	<u>1.0 tree</u>
<u>6" to 15"</u>	<u>2.0 tree</u>
<u>16" to 30"</u>	<u>3.0 trees</u>
<u>31" and 45"</u>	<u>4.0 trees</u>
<u>46" and above</u>	<u>As approved on Tree Protection and Mitigation Plan</u>
<u>*When new trees are required to be planted to meet landscaping requirements, these protected trees may count towards such requirements.</u>	

- b. A tree shall be considered protected if a minimum of 75 percent of the critical root zone is maintained at undisturbed natural grade and no more than 25 percent of the canopy is removed due to building encroachment.
- c. Credit is granted for a protected tree or canopy area being saved only when it is clearly demonstrated by the Applicant that an improvement associated with the development has been designed to preserve a protected tree or canopy area.
- d. ~~For every protected tree or canopy area saved, the developer shall receive a one (1) inch caliper credit per one (1) inch DBH or one (1) square foot per one (1) square foot of tree canopy credit towards tree replacement. [Deleted text]~~

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[The following section has been renamed and organized to create a clear Tree Removal Permit application path including Table]

4. **Tree Removal Permit Applications:** Shall be required for all applications for a development plan, site plan or subdivision plat and must be accompanied by a Tree Survey, Tree Canopy Delineation (in lieu of a Tree Survey) and/or a Tree Protection Plan as established in Table 3.06.03-2.

Table 3.06.03-2: Tree Removal Permit Applications	
Type of Development Application	Type of Plans Required
<u>New Development</u>	
<u>Zoning Change Application (with a Concept Plan)</u>	<u>Tree Canopy Delineation and Tree Protection Plan</u>
<u>Site Plan Application</u>	<u>Tree Survey and Tree Protection Plan</u>
<u>All plat applications (Preliminary Plat, Final Plat, Replat)</u>	<u>Tree Survey and Tree Protection Plan</u>
<u>Building Permit</u>	<u>Approved Tree Survey* and Tree Protection Plan During Construction</u>
<u>Existing Development</u>	
<u>Building addition: Less than 50%</u>	<u>Tree Survey and Tree Protection Plan for the expansion area only</u>
<u>Building addition: 50% or higher</u>	<u>Tree Survey and Tree Protection Plan for the entire site</u>
<u>Removal of any protected tree or Land disturbance</u>	<u>Tree Removal Permit (with a Tree Survey or Tree Canopy Delineation)</u>
<u>*Not applicable if approved Tree Removal Permit has been received during site plan or plat approval process.</u>	

5. If a landscape plan is required with the development or site plan, the Tree Survey or Tree Canopy Delineation and Tree Protection Plan shall be submitted with the landscape plan. The Tree Survey or Tree Canopy Delineation and Tree Protection Plan must include the information specified in **Section 3.06.03 D.** below.
6. Information required on all Tree Removal Permits: All requests for tree removal permits must be accompanied by an application and a graphic exhibit showing at least the following items:
 - a. Tree canopy delineation or tree survey as required in Table 3.06.03-2
 - b. Location of all ROW lines and public easements within 50 feet of the tree proposed for removal
 - c. Location of all buildings, structures, pools, parking, and other improvements which are existing or intended on the lot and located within 50 feet of the tree proposed for removal
 - d. Areas of proposed cut/fill and drainage flow line, if applicable
 - e. Limits of construction line shown, if applicable

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- f. Location of all protected tree(s) and thicket boundaries within 50 feet of any construction area, with a description of the size and types of trees
 - g. The location of all protected trees which are to be removed.
 - h. DBH, Latin and common name of tree to be removed
 - i. Location of any required replacement trees shown with caliper size and common name of tree. *[Section moved from original Section 3.06.03D.14.b.]*
7. Decision on Tree Removal Permits: Upon receipt of the Tree Removal permit application, the Director of Development Services may take one (1) of the following actions:
 - a. Deferral of Decision: The Director of Development Services may defer the approval of a tree removal permit to the Town Council for any reason. All decisions made by the Town Council shall be final.
 - b. Approval: The Director of Development Services, or the Town Council on referral or appeal, shall issue a tree removal permit if it is determined that the application meets one (1) of the following criteria:
 - i. The removal of the tree(s) is consistent with an approved Tree Survey and Tree Protection Plan;
 - ii. The tree constitutes a hazard to life or property which cannot be reasonably mitigated without removing the tree;
 - iii. The tree is dying, dead, or diseased to the point that restoration is not practical; or
 - iv. All reasonable efforts have been made to avoid removing the tree for purposes of development and removal cannot be avoided.
 - c. Denial: The Director of Development Services, or the Commission on referral or appeal, shall deny an application for a tree removal permit if it is determined that:
 - i. Removal of the tree is not reasonably required in order to conduct anticipated activities; or
 - ii. A reasonable accommodation can be made to preserve the tree.
 - d. Appeal of Decision: Any decision made by the Director of Development Services may be appealed to the Town Council. All appeals to the Town Council shall be decided by majority vote and are final.
 - e. Permit Expiration: Permits for tree removal issued in connection with a Building Permit, site plan, development plan, or Preliminary Plat shall be valid until such permit, plan, or plat expires. Permits for tree removal not issued in connection with any of the above items shall be void 180 days after the issue date on the permit. *[Section moved and reorganized from original Section 3.06.03.D.14.c]*
- D. **Types of Tree Plans** *[moved from 3.06.03 D.8 through D.11]*
 1. **Tree survey:**
 - a. A tree survey and tree protection plan shall be required for development impact areas and shall accompany development applications as indicated in Table 3.06.03-2 above.
 - b. Each tree survey and tree protection plan shall contain, but not limited to, the following required elements:

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- i. The locations of all trees to be preserved, removed, and replaced on the subject site
 - ii. A table containing the following information for all trees:
 - 1) Tree number;
 - 2) Common name of each tree;
 - 3) Circumference of each protected tree;
 - 4) Diameter (dbh) of each tree;
 - 5) General health and condition of each tree;
 - 6) Average canopy spread;
 - 7) Classification (quality and type of tree – protected or noxious) and status (preserve or remove) for each tree; and
 - 8) Tree replacement worksheet based on credits applicable to protected trees in Table 3.06.03-1.
 - c. The tree survey and protection plan shall be prepared by or under the supervision of an ISA certified or ASCA registered arborist, a SAF certified forester, botanist, professional land surveyor that has documented completion of at least eight hours of training in Texas tree identification, or a registered landscape architect.
 - d. Residential subdivisions that are to be developed in phases must provide a plan that complies with the preservation requirements at full build-out as approved on the preliminary plat.
 - e. Any subsequent redevelopment of the property shall preserve the minimum percentage dbh inches as indicated by the initial tree survey and preservation plan.
 - f. A notation must be placed on the preliminary plat, final plat, site plan, and building permit identifying the dbh of trees to be preserved and the location of the lots that contain the preserved trees. The notation shall limit any future unauthorized land disturbing activity or construction that would impact and/or damage the tree(s) preserved.
 - g. A tree survey and preservation plan shall follow **Section 3.06.03 C. 7** above for the decision-making process.
- 2. **Tree Canopy Delineation:** Tree Canopy Delineation shall include (See Figure 3.06.03-1) *[moved from 3.06.03 D.10 and D. 11]*:
 - a. Aerial photography of the subject properties that contain a wooded area(s), in lieu of a Tree Survey.
 - b. Authorization for submittal of an aerial photograph accompanied by a transparent plan of the development at the same scale as the photograph showing all non-disturbance areas, proposed exemption areas, and delineating those tree canopy areas affected by land disturbing or development activities may be permitted.
 - c. Such aerial photo shall be date stamped, so as to ensure that the photo is no more than two (2) years old and was taken during a season in which foliage is in bloom.
 - d. A non-disturbance area may be designated on the tree canopy delineation plan.

- e. Trees within the non-disturbance area are not required to be individually identified.
- f. A proposed exemption area may be identified on the plan. The exemption area corresponds to areas of the site specifically exempted from the tree replacement and protection requirements of this Ordinance.
- g. Trees within proposed exemption areas are not required to be individually identified on the plan.

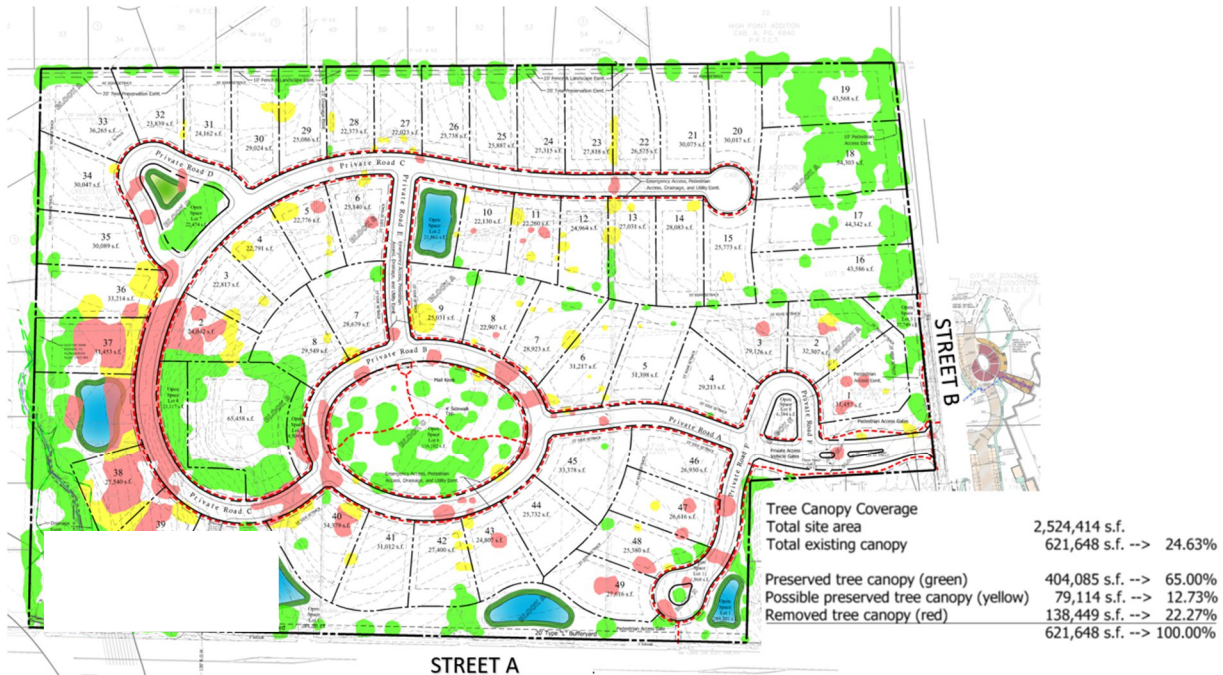


Figure 3.06.03-1: Example of a Plan Showing Tree Canopy Delineation *[added illustration]*

- 3. Tree Protection Plans: Unless otherwise approved in writing by the Director of Development Services, the following procedures shall be followed on all construction projects. *[moved from 3.06.03. D.12]*
 - a. Tree Flagging. All protected trees on the subject property within 50 feet of a construction area or surface improvements such as driveways and walks, shall be flagged with bright florescent orange vinyl tape wrapped around the main trunk at a height of four (4) feet or more, such that the tape is very visible to workers operating construction equipment.
 - b. Open Space Flagging. All trees or groups of trees within areas intended to be saved as open space shall be enclosed with fluorescent orange tape along all areas of possible access or intrusion by construction equipment. Tape shall be supported at a minimum of 25-foot intervals by wrapping trees or utilizing another approved method. Single incident access for the purposes of clearing underbrush is allowed.
 - c. Protective Fencing. In those situations where a protected tree is so close to the construction area that construction equipment will infringe on the root system, a protective fencing may be required between the tree and the construction activity.

- d. Bark Protection. In situations where a protected tree remains in the immediate area of intended construction, the tree shall be protected by enclosing the entire circumference of the tree with a two (2) inch x four (4) inch lumber encircled with wire or other means that do not damage the tree in order to protect the bark of the tree against incidental contact by large construction equipment.
 - e. Boring. Boring of utilities under protected trees may be required in certain circumstances. When required, the length of the bore shall be the width of the critical root zone at a minimum, and shall be at a minimum depth of 48 inches.
 - f. Grade Change. Grade changes within the critical root zone of a protected tree should not exceed two (2) inches. If more than 25 percent of the critical root zone is disturbed by trenching or a grade change greater than two (2) inches, the Applicant may be required to prune the root zone or tree canopy per industry standards or take some other mitigative measure to help preserve the health of the tree.
 - g. Trenching. All trenching, where possible, shall be designed to avoid crossing the critical root zone of any protected tree.
 - h. Root Pruning. It is recommended that all roots two (2) inches or larger in diameter which are exposed as a result of trenching or other excavation shall be cut off square with a sharp, medium tooth saw and covered with pruning compound within two (2) hours of initial exposure.
4. Prohibited Activities During Construction or Utility Activities: The following activities are prohibited within the limits of the critical root zone of any protected tree subject to the requirements of this Section: *[moved from 3.06.03. D. 13]*
- a. Material Storage. No materials intended for use in construction, or waste materials accumulated due to excavation or demolition, shall be placed within the limits of the critical root zone of any protected tree.
 - b. Equipment Cleaning/Liquid Disposal. No equipment shall be cleaned, or other liquids deposited or allowed to flow over land, within the limits of the critical root zone of a protected tree. This includes, without limitation, paint, oil, solvents, asphalt, concrete, mortar or similar materials.
 - c. Tree Attachments. No signs, wires, or other attachments other than those of a protective nature shall be attached to any protected tree.
 - d. Vehicular Traffic. No vehicular and/or construction equipment traffic or parking shall take place within the limits of the critical root zone of any protected tree other than on an existing street pavement. This restriction does not apply to single incident access within the critical root zone for purposes of clearing underbrush, establishing the building pad and associated lot grading, vehicular traffic necessary for routine utility maintenance or emergency restoration of utility service or routine mowing operations.
 - e. Grade Changes. No grade changes in excess of four (4) inches (cut or fill) shall be allowed within the limits of the critical root zone of any protected

tree unless adequate construction methods are utilized which have been approved by the Building Official.

- f. Impervious Parking. No paving with asphalt, concrete or other impervious materials in a manner which may reasonably be expected to kill a tree shall be placed within the limits of the critical root zone of a protected tree except as otherwise allowed in this Section.

E. Exemptions [Moved from old 3.06.03. C; AG uses are called out separately in the new 3.06.03. B.3]

The requirements specified in this Ordinance, including the requirement for a Tree Removal Permit shall not be required in the following circumstances:

1. Damaged/Diseased Trees. The tree is dead, diseased, damaged beyond the point of recovery, or in danger of falling as determined by a certified arborist.
2. Property on which an occupied, single-family dwelling unit exists, except trees designated for preservation on an approved Tree Protection Plan shall be preserved unless otherwise exempt by TLGC 212.905, as amended.
3. Public Safety. The tree creates unsafe vision clearance, conflicts with other ordinances and regulations, or the tree is determined to be in a hazardous or dangerous condition, resulting in a danger to public health, safety or welfare.
4. Utility Service Interruption. The tree has disrupted a public utility service due to tornado, flood, or another natural act. Removal shall be limited to the part of the tree which is found necessary to re-establish and maintain the utility service.
5. Utility Companies, Utility Service, and Distribution/Transmission Lines. Utility companies (public and private) shall not be subject to the tree protection or replacement requirements in this ordinance when establishing distribution and transmission lines. When establishing new utility service, services should be routed between the service pole or transmission and distribution lines and the building being served in a manner that does not require the removal of protected trees. All rights of ways, easements or similar types of public property maintained by utility companies shall not be subject to the tree protection or replacement requirements.
6. Street Dedications. Newly dedicated right-of-way (ROW), as defined by this Ordinance, necessary for the orderly and efficient development of property.
7. Licensed Plant or Tree Nursery. The tree is located on the property of a licensed plant or tree nursery, in which trees planted and growing on the premises are for the sale or intended sale to the general public in the ordinary course of business.
8. Any tree listed on the Texas Department of Agriculture Noxious and Invasive Plant List (Exhibit A).
 - i. ~~Particular Tree Species. The following species of trees are exempt from tree protection or replacement plan requirements:~~
 - ~~Bois D'Arc~~
 - ~~Cottonwood~~
 - ~~Hackberry~~
 - ~~Honey Locust~~
 - ~~Mesquite~~

- ~~Mimosa~~
- Cedars that are less than 11 inches DBH

F. Prohibited Activities *[moved from 3.06.03. D. with added definitions for clarity]*

1. Clear Cutting: Clear-cutting of land is the practice of cutting down most or all of the trees on a property at the same time.
2. Tree Topping: Tree topping is the severe cutting back of branches to stubs larger than three (3) inches in diameter within the tree's canopy to such a degree as to remove the normal canopy and disfigure the tree.
3. Removal Without a Permit: Removal of any protected trees without a Tree Removal Permit unless otherwise exempt by this Ordinance.

~~No person engaged in new development shall cut down, destroy, move, remove, or effectively destroy through damaging (physically, chemically, or biologically), any protected tree located on private or public property, including without limitation public Right-of-Way, easements, and franchise and utility easements, nor shall any land be disturbed, graded or otherwise developed within the Town without first having obtained approval of a tree protection plan, except as otherwise provided in this Section.~~

G. Tree Replacement Requirements *[new section created from original 3.06.03 D. 15 with reorganization for clarity]*

1. **General Requirements:**
 - a. Following approval of a tree removal permit or tree protection plan, the Applicant shall replace the protected trees being removed with trees listed in the Town's Required Tree and Plant List (Exhibit B).
 - b. **Replacement based on Tree Survey:** A sufficient number of trees shall be planted to equal, in caliper, the diameter of the tree(s) removed. Credits for protected trees that are to remain shall be based on Table 3.06.03-1. Existing Tree Credits.
 - c. **Replacement based on Tree Canopy Delineation:** For properties that change from Agricultural use to other use under Section 3.06.03.B.3., tree replacement shall be equal the square footage of the canopy removed. For each tree planted, the credited canopy will be at normal maturity, based upon the following:
 - i. Large trees with a crown width of 50 feet in diameter will equate to 2,000 square feet measured 40 feet on center.
 - ii. Medium trees with a crown width of 30 feet in diameter will equate to 700 square feet measured 24 feet on center.
 - iii. Small trees with a crown width of 10 feet in diameter will equate to 100 square feet measured 8 feet on center.
 - d. Replacement trees shall be located on the subject site prior to issuance of the first Building Permit for the property.
 - i. If this is not feasible, the Town Manager may allow replacement trees to be located on another property.
 - ii. If replacement is not possible on-site or on another property, funds must be contributed to the Tree Reforestation Fund, as provided for within Section 3.06.03. H. Tree Reforestation Fund

e. Standards for Replacement Trees:

- i. Replacement trees shall not be planted in a location where the mature canopy of the tree will interfere with overhead utility lines or where the mature root zone will interfere with underground public utility lines.
 - ii. No trees shall be planted within 10 feet of a fire hydrant.
 - iii. All replacement trees shall be guaranteed for one (1) year from the date of final inspection and acceptance of the project.
 - iv. Replacement trees shall be planted prior to the issuance of a Certificate of Occupancy or filing of a final plat in case of a subdivision plat.
 - v. In cases where the prime planting time does not correspond with project completion, replacement tree plantings may take place after the project is released by the Town; provided that before project release, a fiscal security is posted in the amount equal to the prevailing rate for installed trees with a one (1) year guarantee.
- f. Existing trees can be transplanted to meet the replacement requirements under the following conditions:
- i. Trees of at least three (3) caliper inches are eligible for transplanting.
 - ii. Transplanted trees must be maintained in a healthy condition for a period of two (2) years. The developer who received the transplanting credit must replace trees that do not meet these criteria.
2. Transplanted trees must be listed in the Tree Survey with the notation that they are being transplanted.
3. **Tree Planting on Residential Lots:** Prior to issuance of a Certificate of Occupancy, the developer or builder of a residential lot shall plant a sufficient number of trees on the lot to assure that the following numbers of trees exist on the site: *[moved from 3.06.03.B.2]*

Table <u>3.06.03-3</u> : Minimum Number of Trees	
Lot Size	Number of Trees
1 acre or larger	3
Less than 1 acre	2

[Following Section 3.06.03.D.16 has been deleted]
Alternative Compliance for Tree Replacement

The Town Council may accept and approve a request for alternative compliance of the following requirements, based upon a finding that the proposed alternative is, at a minimum, equivalent to and meets the spirit and intent of this Section.

a. ~~Number of Required Replacement Trees~~

- ~~i. A reduction to the number of required replacement trees may be granted if xeriscape landscape design is used on the project.~~
- ~~ii. A written recommendation from a local registered landscape architect must accompany a request for a reduction to the number of required replacement trees.~~

H. Tree Reforestation Fund *[moved and reorganized from Section 3.06.03.D. 17]*

1. In situations in which it is not feasible to place the required number of replacement trees on either the subject property or an alternate site, the Applicant would need to make payment into the reforestation fund.
 - a. The amount provided shall be equivalent to 100 percent of the tree replacement costs. **The standard value for tree replacement is \$200 per caliper inch as measured in the tree survey.**
 - b. No certificates of occupancy shall be issued for a site until the required payment has been made to the tree reforestation fund.
 - c. The funds shall be used solely for the purpose of purchasing and installing trees along public Right-of-Way, public park land or any other Town-owned property.
2. **Should trees be removed without a permit, the fund amount shall be \$250 per caliper inch removed as would be measured in the tree survey.** Additionally, mitigation will be required as stated in **Section 3.06.03.G.**
3. Funds may also be utilized for the acquisition of wooded property that will remain in a naturalistic state in perpetuity.

I. Tree Maintenance and Enforcement: *[moved and reorganized from 3.06.03. D. 18]*

1. If a replacement tree dies within three years from the date it was planted, the person subject to the original requirement to plant the tree must replace the dead tree with another replacement tree within ninety (90) days of the order of the Director of Development Services ordering the replanting. This requirement to replace dead trees shall be binding even if such person sells, assigns, or transfers the property.
2. **Trees in the Right-of-Way:**
 - a. Maintenance Responsibility:
 - i. Street trees shall be maintained by the adjoining property owner
 - ii. It is the adjoining property owner's responsibility to water, prune, fertilize, and treat for insect and disease, as may be deemed necessary. All incurred costs are to be borne by the adjoining property owner.
 - b. Tree Canopy Height Clearance: Street trees shall be pruned as required under I.3.b below.
 - c. The owners of any tree adjacent to a public Right-of-Way shall remove all dead, diseased or dangerous trees, or broken or decayed limbs that constitute a menace to the safety of the public.

- d. The Town shall have the right to prune trees overhanging the Right-of-Way as necessary to preserve the public safety.
- 3. **Tree Pruning Standards:**
 - a. Pruning Technique: All pruning shall be conducted in accordance with the most recent Arboricultural Specifications and Standards of Practice of the International Society of Arboriculture as published from time to time by the American National Standard for Tree Care Operations (ANSI A300).
 - b. Required Pruning: The owner of land abutting on any public street right-of-way shall be required to provide reasonable and routine care of trees and vegetation in or adjacent to the right-of-way, and shall promptly take action to remove all dead, diseased or hazardous trees, or broken or decayed limbs which may constitute a threat or danger to the safety of the public. Such owners shall maintain a minimum clearance of fourteen feet (14') above the traveled pavement or curb of a public street or as approved by the Fire Marshal and a clearance of eight feet (8') above the surface of a sidewalk.
 - c. Ground Level Cuts: Where protected tree removal is allowed by this Ordinance, but the root system of the tree to be removed is intertwined with the root system of any protected tree whose removal is prohibited by this Ordinance, the tree shall be removed by flush cutting with the natural level of the surrounding ground. Where stump removal is also desired, stump grinding shall be allowed or, upon written approval by the Director of Development Services, a trench may be cut between the two trees sufficient to cut the roots near the tree to be removed, thereby allowing removal of the remaining stump with minimal damage to the root system of the tree to be saved
 - d. No protected tree shall be pruned in a manner which significantly disfigures the tree or in a manner which would reasonably lead to the death of the tree.
 - e. The Town may approve the pruning of a protected tree in cases where protected trees must be pruned to allow for construction or demolition of a structure.
 - f. All pruning of protected trees by a franchise utility company to ensure the safe operation of such utility services will be allowed.
 - g. A tree permit is not required for reasonable pruning performed or contracted to be performed by the owner of any tree adjacent to a public Right-of-Way.
 - h. Trees that are severely damaged by storms or other natural causes or trees faced with obstructions where other pruning practices are impractical may be exempted from this Ordinance at the determination of the Director of Development Services or their authorized designee.
- 4. Irrigation Standards: All new replacement trees planted to meet the requirements of this Ordinance shall meet the maintenance and irrigation standards in Section 3.06.02. B.8 Landscape Maintenance Requirements.

EXHIBIT A: INVASIVE AND NOXIOUS TREES AND PLANT LIST[#]

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
Bois d'Arc	<i>Maclura pomifera</i> female only	Alligator weed	<i>Alternanthera philoxeroides</i>
Cottonwood	<i>Populus deltoides</i>	bBalloonvine	<i>Cardiospermum halicacabum</i>
Chinaberry	<i>Melia azeoarach</i>	Broomrape	<i>Orobanche ramosa</i>
Hackberry	<i>Celtis occidentalis laevigata</i>	Camelthorn	<i>Alhagi camelorum</i>
Honeylocust	<i>Gleditsia triacanthos</i>	Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Mesquite	<i>Prosopis glandulosa</i>	Giant duckweed	<i>Spirodela oligorrhiza</i>
Mulberry	<i>Morus alba</i>	Giant reed	<i>Arundo donax</i>
Tree of Heaven	<i>Ailanthus altissima</i>	Hedge bindweed	<i>Calystegia sepium</i>
Black Willow	<i>Salix nigra</i>	Hydrilla	<i>Hydrilla verticillata</i>
Brazilian Peppertree	<i>Schinus terebinthifolius</i> Raddi	Itchgrass	<i>Rottboellia cochinchinensis</i>
Chinese Tallow Tree	<i>Triadica sebifera</i>	Japanese dodder	<i>Cuscuta japonica</i>
Paperbark	<i>Melaleuca quinquenervia</i>	Kudzu	<i>Pueraria montana</i> var. <i>lobata</i>
Saltcedar	<i>Tamarix spp.</i>	Lagarosiphon	<i>Lagarosiphon major</i>
Japanese climbing fern	<i>Lygodium japonicum</i>	Ppurple loosestrife	<i>Lythrum salicaria</i>
Torpedograss	<i>Panicum repens</i>	Rooted water hyacinth	<i>Eichhornia azurea</i>
Tropical soda apple	<i>Solanum viarum</i>	Salvinia	<i>Salvinia spp.</i>
Water spinach	<i>Ipomoea aquatica</i>	Serrated tussock	<i>Nassella trichotoma</i>
Water hyacinth	<i>Pontederia crassipes</i>	Water lettuce	<i>Pistia stratiotes</i>

[#]Due to the proximity of the Town to Lake Ray Hubbard and to protect Town parks, all trees and plants on the Texas Department of Agriculture Noxious Plant List (TAC §19.300(a)) may be removed without a permit.

EXHIBIT B: Required Tree and Plant List**

SHADE TREES	SCIENTIFIC NAME	CROWN WIDTH	HEIGHT
Afghan Pine	<i>Pinus eldarica</i>	15-20'	30-50'
Ash, Texas*	<i>Fraxinus texensis</i>	20-40'	30-45'
Boxelder	<i>Acer negundo</i>	35-50'	50-75'
Catalpa	<i>Catalpa bignonioides</i>	30-50'	40-60'
Cherry-laurel	<i>Prunus caroliniana</i>	15-20'	20-40'
Chinese Pistache	<i>Pistacia chinensis</i>	20-30'	30-35'
Chittamwood*	<i>Sideroxylon lanuginosum</i>	30-40'	50-60'
Common Persimmon*	<i>Diospyros virginiana</i>	20-30'	40-50'
Cypress, Arizona	<i>Cupressus arizonica</i>	10-20'	20-50'
Cypress, Bald*	<i>Taxodium distichum</i>	40-50'	40-75'
Deodar Cedar	<i>Cedrus deodara</i>	40-50'	40-70'
Elm, American*	<i>Ulmus americana</i>	40-60'	50-70'
Elm, Cedar*	<i>Ulmus crassifolia</i>	30-50'	40-70'
Elm, Lacebark	<i>Ulmus parvifolia</i>	30-50'	40-60'
Gum Bumelia	<i>Bumelia lanuginosa</i>	30-50'	40-80'
Linden Tree (Basswood)	<i>Tilia americana</i>	30-50'	50-70'
Maple, Caddo	<i>Acer barbatum var. caddo</i>	30-40'	40-50'
Oak, Bigelow (Scrub Oak)*	<i>Quercus sinuata var. breviloba</i>	10-35'	10-40'
Oak, Bur*	<i>Quercus macrocarpa</i>	40-70'	40-70'
Oak, Chinquapin*	<i>Quercus muehlenbergii</i>	30-50'	40-70'
Oak, Compton's	<i>Quercus comptoniae</i>	40-50'	40-60'
Oak, Durand*	<i>Quercus durandii</i>	40-50'	40-60'
Oak, Live*	<i>Quercus virginiana</i>	40-60'	40-60'
Oak, Shumard*	<i>Quercus shumardii</i>	30-70'	40-80'
Oak, Southern Red	<i>Quercus falcata</i>	30-70'	40-75'
Oak, Texas Red*	<i>Quercus buckleyi (texana)</i>	30-50'	40-50'
Pistache, Chinese	<i>Pistacia chinensis</i>	20-30'	40-60'
Pecan*	<i>Carya illinoensis</i>	30-70'	40-80'
Southern Magnolia*	<i>Magnolia grandiflora</i>	30-60'	60-80'
Soapberry, Western*	<i>Sapindus drummondii</i>	30-40'	40-50'
Sycamore	<i>Platanus occidentalis</i>	30-60'	45-75'
Sycamore, Mexican	<i>Platanus mexicana</i>	30-60'	45-75'
Walnut, Black	<i>Juglans nigra</i>	30-50'	40-70'

DRAFT – with annotations

ORNAMENTAL TREES	SCIENTIFIC NAME	CROWN WIDTH	HEIGHT
Althea (Rose of Sharon)	<i>Hibiscus syriacus</i>	6-10'	8-12'
Bird of Paradise	<i>Caesalpinia gilliesii</i>	7-10'	7-10'
Buckeye, Mexican*	<i>Ungnadia speciosa</i>	15'	20'
Buckeye, Red*	<i>Aesculus pavia</i>	12'	25'
Buckeye, Texas*	<i>Aesculus arguta</i>	12'	40'
Carolina Buckthorn*	<i>Rhamnus caroliniana</i>	15'	15'
Crepe Myrtle, Cinnamon Bark	<i>Lagerstroemia fauriei</i>	15'	20'
Crepe Myrtle (tree form)	<i>Lagerstroemia indica</i>	15'	20'
Desert Willow*	<i>Chilopsis linearis</i>	15'	20-25'
Eastern Red Cedar*	<i>Juniperus virginiana</i>	20'	40'
Eve's Necklace*	<i>Sophora affinis</i>	15'	20'
Hawthorn*	<i>Crataegus spp.</i>	15'	20'
Holly, Possumhaw*	<i>Ilex decidua</i>	15'	20'
Holly, Yaupon*	<i>Ilex vomitoria</i>	20'	20'
Japanese Black Pine	<i>Pinus thunbergiana</i>	12-20'	20-60'
Juniper, Blue Point	<i>Juniperus chinensis 'Blue Point'</i>	8'	15'
Juniper, Hollywood	<i>Juniperus chinensis 'Torulosa'</i>	10'	15'
Juniper, Wichita Blue	<i>Juniperus scopulorum 'Wichita'</i>	8'	18'
Magnolia, Little Gem	<i>Magnolia grandiflora 'Little Gem'</i>	8-10'	15-20'
Magnolia, Saucer	<i>Magnolia x soulangeana</i>	20-25'	20-25'
Mexican Plum*	<i>Prunus mexicana</i>	15-20'	15-20'
Oak, Lacey*	<i>Quercus glaucoides</i>	15-20'	25-30'
Pomegranate	<i>Punica granatum</i>	10'	15'
Possumhaw Holly*	<i>Ilex decidua</i>	15'	20'
Prairie Flameleaf Sumac*	<i>Rhus lanceolata</i>	20'	15-20'
Redbud, Eastern*	<i>Cercis canadensis var. texensis</i>	15-20'	15-20'
Redbud, Mexican*	<i>Cercis canadensis var. mexicana</i>	10-15'	10-15'
Roughleafed Dogwood*	<i>Cornus drummondii</i>	15'	15'
Rusty Blackhaw Viburnum*	<i>Viburnum rufidulum</i>	15-35'	10-30'
Texas Kidneywood*	<i>Eysenhardtia texana</i>	8-10'	8-10'
Texas Mountain Laurel*	<i>Sophora secundiflora</i>	10-15'	15-20'
Texas Persimmon*	<i>Diospyros texana</i>	12'	20'

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ORNAMENTAL TREES	SCIENTIFIC NAME	CROWN WIDTH	HEIGHT
Toothache Tree*	<i>Zanthoxylum clava-herculis</i>	15'	20'
Vitex	<i>Vitex agnus-castus</i>	5-20'	8-20'
Walnut, Texas*	<i>Juglans microcarpa</i>	15-20'	20-25'
Wax Myrtle*	<i>Myrica cerifera</i>	10'	15-18'
<u>Japanese, Maple</u>	<u><i>Acer palmatum</i></u>	<u>15'-33'</u>	<u>20'-30'</u>

SHRUBS	SCIENTIFIC NAME
Abelia, Glossy	<i>Abelia x. grandiflora var.</i>
Agarita*	<i>Mahonia trifoliolata</i>
Althea (Rose of Sharon - shrub)	<i>Hibiscus syriacus</i>
American Beautyberry*	<i>Callicarpa americana</i>
Apache Plume, Ponil	<i>Fallugia paradoxa</i>
Barberry	<i>Berberis gracilis</i>
Barberry, Crimson Pygmy	<i>Berberis thunbergii</i> 'Crimson Pygmy'
Bridal Wreath Spiraea	<i>Spiraea prunifolia</i>
Burning Bush (Dwarf)	<i>Euonymus alatus</i> 'Compacta'
Cherry Laurel, Compact	<i>Prunus caroliniana</i> 'compacta'
Cleyera	<i>Cleyera japonica</i>
Coral Berry*	<i>Symphoricarpos orbiculatus</i>
Crepe Myrtle (Semi-Dwarf)	<i>Lagerstroemia indica</i>
Crepe Myrtle (Dwarf)	<i>Lagerstroemia indica</i>
Crepe Myrtle, Miniature	<i>Lagerstroemia indica</i>
Dwarf Pomegranate	<i>Punica granatum</i>
Dwarf Spirea	<i>Spiraea spp.</i>
Elaeagnus	<i>Elaeagnus pungens</i> 'Fruitlandii'
Forsythia (Elbow Bush)*	<i>Forestiera</i>
Flowering Quince	<i>Chaenomeles japonica</i>
Fragrant Mimosa*	<i>Mimosa borealis</i>
Holly, Burford	<i>Ilex cornuta burfordii</i>
Holly, Burford (Dwarf)	<i>Ilex cornuta burfordii</i> 'Pygmy'
Holly, Foster	<i>Ilex x attenuata</i> 'Fosteri'
Holly, Nellie R Stevens	<i>Ilex x.</i> 'Nellie R. Stevens'
Holly, Yaupon (Dwarf)*	<i>Ilex vomitoria</i>
Holly, Chinese (Dwarf)	<i>Ilex cornuta</i> 'Rotunda'
Honeysuckle, Texas*	<i>Lonicera albiflora</i>
Honeysuckle, Winter/Bush	<i>Diervilla sessilifolia</i>
Hypericum	<i>Hypericum spp.</i>
Italian Jasmine	<i>Jasmine nudiflorum</i>
Indian Jasmine	<i>Jasminum sambac</i>
Japanese Aucuba	<i>Aucuba japonica</i>
Mahonia, Leatherleaf	<i>Berberis bealei</i>
Mahonia, Soft Caress	<i>Mahonia eurybracteata</i> 'Soft Caress'
Mazari Palm	<i>Nannorrhops ritchiana</i>
Nandina, Compact	<i>Nandina domestica</i> 'Compact'
Nandina, Harbor Dwarf	<i>Nandina domestica</i> 'Harbour Dwarf'

DRAFT – with annotations

SHRUBS	SCIENTIFIC NAME
Nandina, Standard	<i>Nandina domestica</i>
Nolina, Lindheimer*	<i>Nolina lindheimeri</i>
Nolina, Texas*	<i>Nolina texana</i>
Oakleaf Hydrangea	<i>Hydrangea quercifolia</i>
Palmetto, Dwarf*	<i>Sabal minor</i>
Photinia, Chinese (TX adapted)	<i>Photinia serrulata</i>
Purpleleaf, Japanese	<i>Berberis thunbergii</i> 'Atropurpurea'
Sage, Texas*	<i>Leucophyllum</i> var.
Sotol, Texas*	<i>Dasylirion texanum</i>
Sotol, Wheeler*	<i>Dasylirion wheeleri</i>
Sumac, Aromatic	<i>Rhus aromatica</i>
Sumac, Evergreen*	<i>Rhus virens</i>
Sumac, Smooth*	<i>Rhus glabra</i>
Wax Myrtle (Dwarf)*	<i>Myrica pusilla</i>
Yucca*	<i>Yucca</i> var.
Yucca, Red*	<i>Hesperaloe parviflora</i>

* Indicates native species

** The use of alternative species that are native and drought tolerant may be permitted with the approval of the Director of Development Services.

For more information:

<http://texastreeid.tamu.edu/index.aspx> - Trees of Texas, Texas A&M Forest Service

<https://plants.sc.egov.usda.gov/java/> - USDA Plants Database